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THE UNIVERSITY OF ALBERTA

DOMESTIC FINANCIAL POLICY  
AND INTERNATIONAL MONETARY SYSTEMS

by

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A THESIS

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The undersigned certify that they have read,  
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## ABSTRACT

The present international monetary system does not offer the most expedient vehicle for corrections of minor or fundamental imbalances which may occur in a country's internal economy or external accounts. The thesis analyzes the problems associated specifically with the use of financial policy to solve imbalances that may occur. The shortcomings of the present system are examined in an attempt to enumerate some criteria for a more efficient system with respect to financial policy. The main reform proposals are presented with emphasis on testing the criteria that have been set out for maximum efficiency.

The thesis concludes that reform proposals which change only the level and the form of international liquidity do not increase substantially the efficacy of financial policy to cure internal-external problems. The reform proposals which change the adjustment mechanism, and hence allow countries to pursue domestic objectives without jeopardizing external balance, are seen to offer a better solution to the problems posed by the present system.



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## CHAPTER I

### INTRODUCTION

Every country in the world today operates in the international economy to some extent. Some economies are relatively open while others are comparatively closed. Viewed in absolute terms, the large industrial nations of the western world transact among themselves the largest proportion of all trade carried on in the world. Most of the foreign investment of the world is also carried on by the above countries. The countries differ from one another in the importance of trade to themselves. Great Britain, for example, is very concerned with trade and investment whereas the United States has only recently become concerned. However important the international balance of payments is to a country, though, a country must somehow strive to have a balance in it. While this is quite true, some nations find it relatively easy to accumulate reserves to protect their exchange rate, so that temporary imbalances within the balance of payments are of minor concern. Other countries find it quite difficult to amass the necessary reserves and, hence, must continually strive to correct any imbalance immediately.





Countries must also endeavour to achieve a certain "balance" in their domestic economies with regard to price stability, economic growth and full employment. A country, therefore, must worry about external balance, involving temporary imbalances or fundamental disequilibria, and also about internal balance, involving the above-mentioned three goals of domestically orientated policies. The internal-external balance problem has many facets. Pursuing one goal domestically may impede the development of another goal domestically or externally, and pursuing an external goal may impede domestic objectives. Therefore, many types of policies have been tried in an attempt to pursue all goals and objectives simultaneously without jeopardizing any one of them. The thesis is concerned with the problems which exist when countries attempt to achieve and maintain both internal and external balance. Only the industrialized nations of the western world will be analyzed because their developed central banks, banking systems and money markets provide an opportunity for government policies to be implemented. Specifically, the thesis will strive to enumerate the problems associated with financial policies in general, and monetary policy in particular, when used to achieve and maintain internal and external balance.

Financial policy is a general term which includes fiscal and monetary policies. By fiscal policy is meant "a



change in tax rates or in the amount of government expenditure which is brought about by fiscal authorities for the purpose of affecting total domestic expenditure, i.e., the total monetary expenditure on all goods and services in the community."<sup>1</sup> By monetary policy is meant "an alteration in the terms on which capital funds can be lent and borrowed brought about by the banking system."<sup>2</sup> The central bank can ease credit by creating additional supplies of money or can restrict credit by stopping or reversing the creation of money.

The implementation of financial policy may then be called demand management, and the thesis attempts to analyze how effective this management is in achieving the desired goals. Other policy measures, though, can be imposed in conjunction with, or in opposition to, financial policies. One such policy measure would be a commercial policy, such as quantitative restrictions, tariffs and exchange controls. Another example would be a change in a country's exchange rate under an adjustable pegged exchange rate system.

Chapter II will discuss the problems associated with the efficacy of financial policy in achieving internal-external balance as experienced by one country operating in the present

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<sup>1</sup>J. E. Meade, The Balance of Payments, Vol. I: The Theory of International Economic Theory (London: Oxford University Press, 1951), p. 99.

<sup>2</sup>Ibid., p. 99.





international monetary system. The problems which plague the whole system today will be discussed in Chapter III. In the next two chapters, proposals for the reform of the international monetary system will be examined within the context of financial policy effectiveness. Chapter IV will concern itself with reforms which attempt to change the form and/or the level of international liquidity while at the same time maintaining a fixed exchange rate system. Chapter V will discuss reforms which change the adjustment mechanism so that, within varying degrees, the exchange rate is allowed to fluctuate. With these reforms, the need for reserves is in an inverse ratio to the flexibility of the exchange rate, i.e., the more flexible the exchange rate, the less the need for international reserves of any kind. The conclusions of the thesis will be embodied in Chapter VI. Implications of the reforms for the effectiveness of financial policy will be enlarged to include the probable reactions of politicians, central bankers, businessmen and economic theoreticians.



## CHAPTER II

### A SINGLE COUNTRY OPERATING UNDER THE PRESENT SYSTEM

Financial policies in an open economy attempt to achieve and maintain internal balance as well as external balance. Internal balance is concerned with price stability, full employment, and economic growth. Financial policies will be implemented if there has been some spontaneous or policy change in domestic or foreign demand. A spontaneous disturbance means "any change in the underlying conditions, the cause of which we are prepared to take for granted and do not wish to examine, but the effect of which on domestic and external positions . . . we wish to examine."<sup>1</sup> A policy change is one in which the government (central bank and/or fiscal authorities) purposefully enacts a policy to initiate a new level of economic activity different from that prevailing previously, or to counteract some spontaneous disturbance which has arisen.

Internal equilibrium or balance is not a term which immediately implies a unique set of conditions that must be

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<sup>1</sup>Ibid., p. 43.





satisfied for it to be obtained. A theoretical approach would be that aggregate demand for domestic output be equal to aggregate supply at full employment.<sup>1</sup> This assumes that the economy being discussed is a closed economy. Even the above definition, however, leaves much to be desired. No mention is made as to whether price stability prevails, and if not, what is causing prices to rise. The definition does not state what is meant by full employment or what is a satisfactory rate of growth for the economy. Aggregate demand can be equal to aggregate supply but prices could still be rising because of, for example, cost-push inflation.<sup>2</sup> Smith<sup>3</sup> suggests a more realistic way to describe the problem. In each country, the policy-makers "trade-off" the goals of full employment and price stability, thereby implying that unemployment is reduced by expansionary financial policies, and that prices will rise as a result of the policies.<sup>4</sup> This also brings up the problem

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<sup>1</sup>R. A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability," International Monetary Fund Staff Papers, IX (March, 1962), 70-79.

<sup>2</sup>The cost-push inflation being considered is that of wage-push as described by W. Fellner, et al., The Problem of Rising Prices (Paris: OECD Publications, 1961).

<sup>3</sup>W. L. Smith, "Are There Enough Policy Tools?" American Economic Review, LV (May, 1965), 208-09.

<sup>4</sup>See also L. R. Klein, and R. G. Bodkin, "Empirical Aspects of the Trade-Offs Among Three Goals: High Level Employment, Price Stability, and Economic Growth," Commission on Money



of what is meant by full employment. Anne and Tibor Scitovsky state that "we get approximately three per cent of the labour force as an estimate of the short-time and irreducible unemployment in a dynamic economy,"<sup>1</sup> giving as reasons such things as voluntary job changers, seasonally unemployed, new workers or re-entrants to the labour market and structural changes in industries to a varying degree. Economic growth also has been stated as a goal of internal balance. This is thought of as a long-term goal and is concerned to a large extent with governmental policies affecting investment activity in the economy. Just as price stability and full employment policies may conflict, so may short-term and basically long-term policies. A long-term goal such as economic growth must not be sacrificed entirely for stop-go short-term policies to correct short-term disequilibria. Enduring short-term discomfort may be more advantageous in the long-term, and again a certain trade-off of goals will be present.

Internal equilibrium or balance is a difficult concept and can only be examined by looking at each country or situation individually. What is regarded as a satisfactory internal

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and Credit, Inflation, Growth, and Employment (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), pp. 367-428.

<sup>1</sup>Anne and Tibor Scitovsky, "Inflation Versus Unemployment: An Examination of Their Effects," Commission on Money and Credit, Inflation, Growth, and Employment (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 433.





balance in one country may not necessarily be regarded as such in another. Policy decisions with regard to this subject cannot be studied until both the economic consequences and the psychological and sociological background of the area under study are known.

Just as financial policies may be implemented to achieve and maintain internal balance, they may also be implemented for reasons of external balance. Equilibrium in the balance of payments may be defined in terms of equality between receipts and payments arising from the flow of goods, services and capital, exclusive of the central bank's external transactions. The current account involves home demand for foreign goods and services and foreign demand for home goods and services. The capital accounts involve the movement of long and short-term capital to and from the home country. Hence, external balance is concerned not only with goods and services, but also with capital movements. A deficit<sup>1</sup> in the balance of payments must be examined closely to determine the source of the problem and, hence, the choice of a policy which will most correctly and efficiently bring the accounts into balance. A deficit may be induced or autonomous, depending on the

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<sup>1</sup>A deficit will be discussed, but the reverse is also true for a surplus.





causes of its existence.<sup>1</sup> If the deficit is caused by dissaving or excess liquidity creation, the deficit would be an induced foreign deficit.<sup>2</sup> On the other hand, if the deficit is caused, for example, by a spontaneous foreign shift in demand away from home goods and services, the foreign deficit would be autonomous in nature. It is not an easy task to determine whether a deficit is induced or spontaneous. However, an example will demonstrate that by examining all the variables, a decision can usually be reached. An autonomous deficit may occur during a recession when credit is tight. Since the tightness should lead to a surplus rather than a deficit, the deficit must be autonomous. Similarly, an induced foreign deficit may be determined.

Before examining the difficulties associated with the dilemma between internal and external equilibrium under the adjustable pegged exchange rate system which prevails in today's international monetary organization,<sup>3</sup> it would be best to

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<sup>1</sup>See M. W. Holtrop, Monetary Policy in an Open Economy: Its Objectives, Instruments, Limitations, and Dilemmas (Princeton: Princeton University Press, 1963), pp. 10-11.

<sup>2</sup>Spontaneous dissaving would correspond to an induced change in a country's economic variables and excess liquidity creation would correspond to a policy change in a country's economic variables, in the terminology of Meade, op. cit., pp. 43-51.

<sup>3</sup>Adjustable pegged exchange rate system means that if a fundamental disequilibrium develops in a country's balance



investigate briefly the efficiency of financial policy, and monetary policy in particular, under the pure gold standard which operated in the latter part of the nineteenth and early part of the twentieth century. The central bank of a country did not practice monetary management, but rather it was completely automatic in its responses to balance of payments disequilibria. Under the pure gold standard, "it [monetary circulation] expanded or contracted, not as a result of conscious monetary policy, but in accordance with the net movements of the international balance of payments."<sup>1</sup> If a country had a favourable balance of payments, gold would flow into the country, monetary circulation would increase, domestic costs and prices would rise and interest rate fall, and the consequent movements in the current and capital accounts would tend to correct the balance of payments surplus. The reverse would be true if a deficit occurred in the balance of payments. There was absolutely no national sovereignty over the size of the money supply or over national objectives. To make the situation even more automatic and efficient, "rules of the game" were instituted.

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of payments, that country will adjust its foreign exchange rate. It is therefore synonymous with a fixed exchange rate system as used in this thesis, and does not mean a managed flexible exchange rate system.

<sup>1</sup>R. Triffin, "National Central Banking and the International Economy," International Monetary Policies, Board of





These required the central bank to maintain a constant cash ratio, thus magnifying the change that occurred in the money supply. The effect on the money supply depended on the size of the ratio. True enough, the central banker was a lender of last resort and, hence, could manage the level of the discount rate; but this did little to alter the fact that international factors were the determinant of central bank monetary policies. During the 1930's, national policies supplanted the classical reasoning of the pure gold standard. However, these were found to be just as unfavourable as the automatic system. Hence, the International Monetary Fund and the adjustable pegged exchange rate system were developed after World War II.<sup>1</sup>

The central bank is responsible not only for maintaining internal monetary equilibrium, but also for managing the exchange reserves of the country. First, the problems associated with achieving and maintaining internal and external balance will be examined from the viewpoint of only one country. Three arguments may be raised at the outset against using price and income adjustments through monetary and fiscal policies to

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Governors of the Federal Reserve System (Washington: U.S. Government Printing Office, 1947), p. 48.

<sup>1</sup>The efficacy of monetary policy under flexible exchange rates (freely and managed) will be discussed in Chapter V below.



achieve domestic and foreign balance.<sup>1</sup> The first argument is that, under modern conditions, domestic prices and incomes are highly inflexible, so that monetary and fiscal policies would only result in distortions and uneven distribution of the effects throughout the different sectors of the economy.<sup>2</sup> Incomes and employment would probably fall rather than prices. Second, balance of payments problems arise so often that monetary and fiscal policies would have to be changed repeatedly. Thus, sound long-term economic policies could not be implemented. This further raises the problem of lags in financial policy adjustments. For example, Smith,<sup>3</sup> in examining monetary policy adjustments, discusses an inside lag, which includes the action needed phase, the need recognized phase, and action taken phase; an intermediate lag; and an outside lag, which includes the effect felt on interest rates and credit conditions phase,

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<sup>1</sup>The arguments are summarized in W. M. Scammell, International Monetary Policy (London: Macmillan and Co. Ltd., 1957), pp. 84-86.

<sup>2</sup>See especially W. L. Smith, "Monetary Policy and the Structure of Markets," Readings in Money, National Income, and Stabilization Policy, ed. W. L. Smith, and R. L. Tiegen (Homewood, Illinois: Irwin Inc., 1965), pp. 356-72; J. K. Galbraith, "Market Structure and Stabilization Policy," Review of Economics and Statistics, XXXIX (May, 1957), 124-33.

<sup>3</sup>W. L. Smith, "Monetary Theory," Readings in Money, National Income, and Stabilization Policy, ed. W. L. Smith, and R. L. Tiegen (Homewood, Illinois: Irwin Inc., 1965), pp. 29-32.





the effect felt on spending decisions phase, and finally the effect felt on output and employment phase. Smith concludes that the inside lag is shorter for monetary policy than fiscal policy, but that the intermediate and outside lags are longer for monetary policy than for fiscal policy. The third argument is that since World War II governments have been committed to full employment above all other goals. It should be noted, however, that unless the balance of payments disequilibrium is fundamental, minor variations of contraction and expansion can usually bring the desired results without compromising the full employment goal to such a degree that the unemployment situation becomes serious.

When examining monetary policy as applied to stabilization policy under a fixed exchange rate system, it will be assumed that capital is fairly mobile between countries. Mundell states that this assumption "should . . . have a high degree of relevance to a country like Canada whose financial markets are dominated to a great degree by the vast New York market."<sup>1</sup> In his analysis, Mundell assumes perfect capital mobility, which does not exist in reality; but the direction of the analysis is certainly correct and revealing from one

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<sup>1</sup>R. A. Mundell, "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates," Canadian Journal of Economics and Political Science, XXIX (November, 1963), 475, (hereafter cited as Capital Mobility and Stabilization).





country's point of view. The dilemma between internal and external balance policies can now be examined. If the central bank attempts to ease credit in the domestic economy and purchases securities on the open market, the result will be a simple trading of domestic assets for foreign assets assuming that capital is completely mobile and that the central bank conducts exchange stabilization operations. The interest rate will fall and capital will flow from the domestic economy to countries abroad. This will cause the exchange rate to fall and necessitate the purchase of the country's currency with foreign exchange to assure exchange parity. As Mundell shows, the central bank has only purchased domestic assets with money, and then bought money with foreign assets. The two effects cancel each other.<sup>1</sup>

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<sup>1</sup>This illustration is an example of "inside" creation of money by a central bank in the terminology of R. I. McKinnon and W. E. Oates, The Implications of International Economic Integration for Monetary, Fiscal and Exchange-Rate Policy (Princeton: Princeton University Press, 1966). The net stock of financial assets held by the private sector will remain unchanged, and thus there will not be any direct wealth effect on expenditures for real commodities. The private sector will determine the supply of money. This is much the same as a government in a closed economy attempting to peg the price of bonds by freely buying and selling to the private sector at a fixed rate of interest. The above authors agree with Mundell's analysis and conclusions, but they add an example of "outside" injection of money such as financing a temporary budget deficit by issuing money. The injection of money is not accompanied by an equivalent removal of financial assets from the private sector. Hence, the net asset holdings of the private sector are increased and there is a direct wealth effect on expenditures for real commodities. The trade balance will go into



The problem becomes more complex if it is examined more closely. On the one hand, there is the problem of how mobile capital really is between countries. If capital is fairly mobile, as was suggested above, then the results in the example will be approximated. The interest rate in the domestic economy will have returned to its original level due to the flight of capital from the country. This is not a speculative flight, but rather a movement caused by an interest rate differential between the domestic economy and the rest of the world. When capital is this mobile, monetary policy is completely ineffectual in relation to objectives in the domestic economy. This raises the point of its effectiveness in achieving external balance, which will be discussed below in this chapter. The other problem which comes out of the example is just how effective is monetary policy in the domestic economy in the first place? In a study by Meyer and Kuh,<sup>1</sup> it was found that "for short-run cyclical variations

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deficit, and exchange rate stabilization policies will drain financial assets out of the domestic economy. "Thus, under fixed exchange rates, the government finds that it cannot permanently alter the stock of assets in the economy, although the offsetting international mechanism is somewhat different from that operating in the case of inside money creation. It depends on commodity flows through the trade balance rather than on purely financial capital movements." (p. 6).

<sup>1</sup>J. R. Meyer, and E. Kuh, "Investment, Liquidity, and Monetary Policy," Commission on Money and Credit, Impacts of Monetary Policy (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), pp. 339-474.







there is some positive interest elasticity of demand for investment, but not much."<sup>1</sup> The authors concluded that manufacturer's investment decisions would be little influenced by monetary policy. Even in the long-run it was found that internal financing was the most important source of funds, so that again investment was insulated from the effects of monetary policy. About the only time that monetary policy seems to affect manufacturer's investment decisions is in the late phase of recovery in the trade cycle, when external financing becomes more important because of payments for newly acquired fixed assets. The study only examined the effectiveness of monetary policy on manufacturer's investment decisions; but manufacturers are the firms that produce the goods, and hence are a very important indicator of the efficacy of monetary policy.

The above example was one of an easy money policy. Monetary policy is supposed to be most effective in the upper region of the interest rate structure because of the existence of the liquidity trap area in the lower region. If capital is assumed to be highly mobile, however, monetary policy will be just as ineffective in the upper region as in the lower region, as discussed above. Monetary policy certainly does have an effect on capital movements and,

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<sup>1</sup>Ibid., p. 343.



hence, on the balance of payments situation, but it is less useful in affecting the domestic economy.<sup>1</sup> In the above discussion, the term "interest rate" was used to imply some rate which was an average of all interest rates (short, intermediate and long) which prevail. It is possible, however, to twist the interest rate structure in such a manner that the short-term interest rates rise or fall while the long-term interest rates remain relatively stable. In a study of the United States,<sup>2</sup> Heller concluded that the impact on the balance of payments of raising short-term rates was either to stop the outflow of funds from the country or to precipitate an inflow of funds, depending on the extent of the rise in the short-term rates. The effect on the long-term rates and credit availability was negligible. In fact, there was relative monetary ease and stable or even declining long-term rates during the time in which the operation was taking place (1962-1963). The above discussion suggests that monetary policy does have an effect on the balance of payments, and the

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<sup>1</sup>This is not to imply that a very harsh monetary policy (i.e., very tight credit and high interest rates) could not affect the domestic economy, but rather that monetary policy is quite ineffective as a short-run anti-cyclical policy tool, except perhaps to individuals and firms who rely solely on bank credit.

<sup>2</sup>W. W. Heller, "Effects of a Rise in U.S. Interest Rates on the Balance of Payments and the Domestic Economy," Readings in Money, National Income, and Stabilization Policy, ed.





policy can be implemented in such a fashion that credit availability and long-term investment in the domestic economy will not be adversely affected.

If the balance of payments disequilibrium is caused by non-monetary causes, such as large and persistent shifts in international demand even though there has been no inflation or deflation or recession, "the only feasible cure will as a rule be the same as for a deficit brought about by excessive inflation--namely, an anti-inflationary policy or a change in the exchange rate."<sup>1</sup> We have the same situation as in the monetary example studied previously. Monetary policy will probably be able to cure the balance of payments deficit to a certain extent, but some other measures will have to be imposed on the domestic economy to bring about the desired reduction in money prices and costs. This means that there must be an absolute reduction only if the country's trading partners hold their money prices and costs stable. If the money prices and costs of the country's trading partners are rising, the country will determine types of measures to apply, and how stringent these policies must be to bring about the desired result. Much will depend upon the amount of capital

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W. L. Smith, and R. L. Teigen (Homewood, Illinois: Irwin Inc., 1965), pp. 473-76.

<sup>1</sup>G. Haberler, Money in the International Economy (London: The Institute of Economic Affairs, 1965), p. 20.





inflow caused by the strict monetary policy and the size of the deficit in the balance of payments in the beginning.

A country can accumulate a deficit in its balance of payments if its growth rate (as measured by total or per capita GNP) is lower than that of its trading partner. This does not automatically mean that in a situation of fast economic growth, a country will enjoy a surplus in its balance of payments. Rather, a situation of this sort could very well mean a deficit because rising incomes imply rising imports. Growth must take the form of import-replacement industries if a surplus is to exist in the balance of payments. The import demand must increase at a decreasing rate, as opposed to import-substitution and export demand. The country which is experiencing the faster growth rate also must not allow inflation to occur at a faster rate than its competitors; for, if it does, the balance of payments will turn against the country and a deficit will result.

Other problems may arise, for example, from spontaneous increases in foreign transfers from one country to another. This would be the case where investors in one country, for some reason other than interest rate differentials or speculation, decide to start investing heavily in another country. Problems in both countries' balance of payments situations could result. If the situation is serious enough, but has not affected demand for goods and



services, intergovernmental transfers of long-term capital or various degrees of governmental interference in international trade and payments could be negotiated. An example of the latter is the interest equalization tax which was imposed by the United States government in an attempt to decrease the amount of long-term capital flowing out of that country. If the demand for goods and services also changes, new problems arise. These are likely to occur because of the volume of capital flowing into one country and out of another. Financial policies will also have to be implemented to offset any secondary repercussions of the original spontaneous disturbance.

Without going too far afield, the imposition of tariffs, import restrictions, exchange controls, etc., will all have the effect of a spontaneous reduction in the volume of goods imported into the country imposing the restrictions. If a tariff is imposed, repercussions on policy decisions will depend on what the government decides to do with the proceeds of the tax. If the government spends the revenue on goods and services or reduces taxation by the amount of the tariff, the situation is the same as before so far as domestic expenditure on goods and services is concerned. The balance of payments will be improved, although the increase in expenditures or decrease in taxes by the government will have some deleterious effects on the balance of payments. If the government keeps





the revenue or does not increase its expenditures, there will be a spontaneous reduction in domestic expenditure in the country imposing the tax equal to the revenue collected from the tariff. The government is then put into the position of evaluating its goals and deciding if the result is desired. Much of the result will depend on the elasticity of demand for imports by the country imposing the tariff. For example, if the price elasticity for imports is high, the reduction in demand for imports will be large, and only a small part of this diversion will go into revenue to the government. The opposite would be true of a low elasticity. Some financial policies may have to be implemented in this case, for external balance would be achieved at the expense of internal balance.

So far, the discussion has centred around one country's problems and the efficacy of financial policy in relation to these problems, be they in the domestic or in the international economy. Before continuing, the effects of one country's policies on another country, and the possible repercussions on the original country, must be examined. A country does not operate in a vacuum and must always tailor its own policies to a certain extent to the policies of other countries. One example will be presented to set out the types of problems which financial policy-makers in general, and the central bank in particular, would be up against.<sup>1</sup> Suppose that a spontaneous

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<sup>1</sup>This example is taken substantially from Meade, op. cit., pp. 104-07. It must be assumed that both countries are important



decline in domestic expenditure in country A occurs, so that a reduction in demand for B's products by A's residents also takes place. The result will be a worsening of the balance of payments and a reduction in national income, employment and production in country B. What B's authorities do to counteract this adverse movement will have a large effect on country A's subsequent policies. Country B's authorities may implement a policy of internal balance, and raise national income and employment at the expense of the balance of payments. Alternatively, they may implement a policy of external balance and lower national income and employment even more, thereby improving the balance of payments because of cheaper terms of trade in their export markets. Country A's authorities can either do nothing, or they can adopt an expansionary policy (decrease taxes, increase government expenditures, increase monetary circulation). The latter would not only achieve internal balance but would also cure the surplus in their balance of payments. Hence, there is no financial policy problem as far as country A is concerned, but there is a conflict of policies for country B. If country A inflates, the demand for country B's exports will increase, and country B's balance of payments problem and internal balance problems could be solved. The above is an example of one country having

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markets for each other and, hence, the repercussions will be felt by both.





no conflict of policy while another does have a conflict. An example in which both countries have a conflict of policies is a spontaneous shift of demand from the products of one country to those of the other. Both countries will now be at cross-purposes as to internal balance and external balance. The purpose of these examples is to show the problems that arise when a country attempts to operate within an international community. One country's financial policies will have repercussions on other countries and the latter will have repercussions on the first country, ad infinitum.

Much has been said about the efficacy of monetary policy in solving problems concerned with internal and external balance. It was concluded that monetary policy exerts its main effect on the international movement of capital and very little effect on investment activity in the domestic economy. Even if the domestic economy is affected to a certain extent by monetary policy (as there is reason to believe), the effects of the policy can be almost negligible if the central bank authorities conduct their operations in short-term liabilities; for this will minimize the effect on credit availability and long-term interest rates. If this be the case, the efficacy of fiscal policy must be examined to determine its effect on the balance of payments and on the domestic economy, and to see if some arrangement of monetary and fiscal policy cannot be implemented which will achieve both internal and external





balance. A fiscal policy of increased expenditure under fixed exchange rates will have a multiplier effect upon income, and hence also upon savings, taxes and imports. The balance of payments, however, will still be in equilibrium; for the import deficit will be balanced by a capital inflow to help finance the budget deficit which was created to enable the government to increase its expenditures. There will be an increase in the country's foreign exchange reserves because a temporary increase in the demand for money as income rises will cause the interest rate to rise. The reserves will increase by the amount that the money supply is increased, and the balance of payments will be in equilibrium after the central bank has executed its exchange rate policy.

From the above it would seem that monetary policy could be used to secure balance of payments equilibrium while fiscal policy could be used to achieve domestic or internal equilibrium. Mundell<sup>1</sup> suggests further that the combination of financial policies mentioned above must be implemented in the direction suggested. Failure to do so, i.e., using monetary policy to achieve internal balance and fiscal policy to achieve external balance, will produce a

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<sup>1</sup>Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability," op. cit., pp. 70-79.



worse disequilibrium than existed before the policies were implemented. The analysis is conducted under the assumption that the country considers it inadvisable to alter the exchange rate or to impose trade controls. Monetary policy is used for external balance and fiscal policy for internal balance because the ratio of the effect of the interest rate on the balance of payments to its effect on internal stability is larger than the ratio of the effect of fiscal policy on the balance of payments to its effect on internal stability. For example, assume a situation of full employment combined with a balance of payments deficit. The rate of interest would be raised through a tight money policy and the resulting capital inflow would correct the external deficit. The policy would also bring a certain amount of unemployment in the domestic economy. The government, therefore, would decrease the budget surplus or increase the budget deficit. This, in turn, would give the country another deficit in its balance of payments, though the deficit would be less than before and the country would have internal balance. The deficit is less because the same passive balance of trade or current account balance is now partially offset by the capital inflow resulting from the higher rate of interest. This assumes the capital is only partially mobile. Otherwise, as mentioned previously in this chapter, there would be no effect in the domestic economy, and there would be a simple trading of foreign assets for domestic





assets. The pairing of a contractionary monetary policy with an expansionary fiscal policy would not produce a stable situation if the income effect of fiscal expansion on the current account was larger than the interest effect of monetary contraction on the capital account.<sup>1</sup> Meade has stated no combination of inflationary and deflationary financial policies can deal effectively with a situation in which there is an excessively high national income in a surplus country requiring deflation and an excessively low national income in a deficit country.<sup>2</sup> It does not matter if the countries adopt internal or external balance policies or combinations of them; the internal or external situation in each of the countries will worsen. This is the type of problem which cannot be solved by financial policies alone. It sets the limit to how much monetary and fiscal policies can be used to correct internal and external problems. This is why countries do not rely on financial policies alone, but also employ policies involving changes in the prevailing exchange rate or trade restrictions. The ramifications of invoking the latter measures will be studied in subsequent chapters. The theme of this chapter was to set out the problems

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<sup>1</sup>These effects are outlined by H. G. Johnson, "Major Issues in Monetary and Fiscal Policies," Federal Reserve Bulletin, L (November, 1964), 1400-13. Reprinted in Smith and Teigen, op. cit., pp. 524-29.

<sup>2</sup>Meade, op. cit., pp. 122-24.



associated with monetary policy, and fiscal policy to a certain extent, in achieving and maintaining internal and external balance without the aid of trade restrictions or exchange rate changes. It is fair to conclude that financial policies can be employed and will be effective in solving the internal-external problem if they are applied before a situation becomes untenable. If applied too late, financial policies have to be made so stringent that they are unacceptable, and other measures have to be invoked. This point is reached when a country's stock of international reserves becomes depleted. The efficiency of financial policies in controlling internal-external balance problems is a function of the level of international reserves that a country holds. The closer a country comes to depleting its stock, the closer it comes to imposing commercial restrictions or an exchange rate devaluation; for immediate action is needed to correct the imbalance in the balance of payments.



### CHAPTER III

#### THE INTERNATIONAL ECONOMY OPERATING UNDER THE PRESENT SYSTEM

The last chapter briefly presented the problems faced by financial policy-makers in general, and central bankers in particular, in resolving the dilemma of achieving and maintaining internal and external balance. The outlook taken represented the viewpoint of one country operating in the international economy with a fixed exchange rate system. The importance of foreign exchange reserves was stressed because the level of reserves has a direct bearing on the efficacy of financial policies. At any given moment, there are countries in the world that have deficits in their balance of payments, and countries that have surpluses. A country in the latter position today occupies a much more favourable position than a country in the former position. In theory, a surplus is no more desirable than a deficit because both denote an imbalance. However, a difference does exist in practice, and it must be recognized as one of the problems of the existing system when the situation is viewed from an international rather than a domestic





viewpoint. The problem then presents itself. Nationally, a country may attempt to bring a deficit into balance; yet under the present fixed exchange rate system, there may not be enough liquidity in the international economy to enable the deficit country to accomplish its plan successfully if, in practice, the surplus countries' best interests seem to be served by keeping the total supply of reserves as small as possible. Another way of stating the problem is to determine whether international liquidity is increasing in step with advances in the world economy under liberal trade and payments conditions. To answer these questions, the existing organization underlying the international monetary system must be examined. An attempt must be made to define what is meant by reserves. The short-comings of the existing system must be investigated with an eye to the question: Can it be reformed from within or must a fundamental overhaul of the whole system be attempted before a satisfactory solution can be found? Finally, the Canadian experience in operating within the present framework must be surveyed briefly to find Canada's place and its problems in the international economy.

When the contracting parties (the main ones being Great Britain and the United States) met to discuss the type of international monetary system which would prevail after World War II ended, the events of 1931 and Great Britain's



experiences loomed large. Equally important was the position which the United States wanted to secure for itself in contrast to the rest of the world. In 1931, there were large shifts from sterling balances into gold and dollars owing to the gradual weakening of foreign confidence in sterling. After World War II, there was no movement to return sterling to the key currency position because of the protracted inconvertibility of sterling and the recurring balance of payments crises of Britain after the war.

The weakening of sterling and of other major world currencies after World War II concentrated the choice of all countries upon the United States dollar as the hardest, and thus safest, medium for the investment of their foreign exchange reserves.<sup>1</sup>

Thus the gold-exchange standard was reinstituted in the world economy. Foreign exchange reserves would consist not only of gold, but also of liquid claims against certain countries. These key-reserve currency countries are the United States and to a lesser extent, Great Britain. However, this "key currencies approach" was ultimately forced to take second place to the universality of the International Monetary Fund formed immediately after World War II.<sup>2</sup> As stated above,

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<sup>1</sup>R. Triffin, Gold and the Dollar Crisis (2nd ed. rev.; New Haven: Yale University Press, 1961), p. 68.

<sup>2</sup>See S. Horie, The International Monetary Fund: Retrospect and Prospect (New York: St. Martin's Press Inc.,





a country now used gold and liabilities of the key-reserve currencies.<sup>1</sup> All member countries of the I.M.F. set the value of their currencies in United States dollars. The United States dollar was set at \$35.00 per ounce of gold so that countries would circulate gold and U.S. liabilities redeemable in gold at any time. This is the essence of the gold-exchange standard.<sup>2</sup> The statesmen and economists who framed the existing monetary arrangement worried not only about the adequacy and the form which international liquidity would take, but also about the problems which a country would face if a temporary imbalance or a "fundamental disequilibrium" existed in a country's balance of payments. The definition and problems associated with the term

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1964), especially pp. 37-96 for a more complete summary of the events leading up to the Bretton Woods Agreement.

<sup>1</sup>The liabilities of other countries such as Germany and France are used to a certain extent also, but are not really considered as key-reserve currencies owing to the overwhelming use of U.S. and British liabilities as part of foreign exchange reserves.

<sup>2</sup>In 1949, the total world supply of gold was approximately \$35 billion (in U.S. dollars). The United States possessed \$24.6 billion of the total or 70 per cent of the world's supply of gold. At that time, there existed an additional \$11.7 billion of reserve currency liabilities of which the American represented only \$3.2 billion. It is no wonder that the United States dollar was chosen in place of sterling as the key-reserve currency. These statistics are compiled from R. Triffin, The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives (Princeton: Princeton University Press, 1964),



international liquidity will be discussed below. Suffice it here to say that the liquidity of a country is measured by its official holdings of gold, key-reserve currency liabilities and its I.M.F. gold-tranche position. To explain a member's gold-tranche position, we must consider a country's subscription to the International Monetary Fund. The subscription usually consists of gold, to the extent of twenty-five per cent of a country's allotted quota, and of seventy-five per cent of its own currency (including its non-negotiable, non-interest-bearing obligations payable in its own currency). A country has the right to purchase other currencies from the I.M.F. with its own currency. This right is qualified by certain conditions: the Fund's holdings of a member's currency (1) should not increase by more than twenty-five per cent of the quota within any one year period, and (2) must never increase above two hundred per cent of the quota. Therefore, "a member's gold-tranche position is essentially its gold subscription to the Fund, minus its net drawings, but plus any amounts of its currency subscription which it has repurchased (with convertible currencies or gold) or which the I.M.F. has sold to other members."<sup>1</sup> A country may purchase other

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Appendix II, pp. 65-83, (hereafter cited as The Evolution of the International Monetary System).

<sup>1</sup>F. Machlup, Plans for Reform of the International Monetary System (Princeton: Princeton University Press, 1964), p. 10.





currencies if a temporary imbalance occurs in its balance of payments and if its own gold and foreign exchange reserves are not sufficient to meet the drain. The word temporary is all-important because there is an interest charge on drawings made by members, even when those drawings happen to be from the country's gold-tranche position with the I.M.F.. The I.M.F. allows a country to purchase other currencies on a short-term basis only. The gold-tranche position is more or less automatically included in a country's reserves. A country is also allowed to borrow beyond its gold-tranche position, but it must pay a higher interest charge to do so. What this all means in the context of Chapter II is that a country has not only its own gold and foreign exchange reserves, but also drawing rights up to a certain point to sustain a temporary imbalance. The country in question has at its disposal additional resources to add to its reserves, but if financial policies, (and especially monetary policy),<sup>1</sup> are to be successful, they must be applied while the imbalance is still small enough for short-run correction.<sup>2</sup>

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<sup>1</sup>This is due to the fact that capital will not flow into a country (even if an interest rate differential exists) when devaluation of that country's currency is expected in the near future because of the inadequacy of the financial policies imposed.

<sup>2</sup>The temporary imbalance could also be corrected in a matter of time simply through the natural course of





The term "fundamental disequilibrium" was used in the Articles of Agreement of the I.M.F. but has never been defined. It would probably be best to "regard as evidence of fundamental disequilibrium any serious and persistent deficit, whether brought about by deflation and depression abroad or by inflationary policies at home or possibly by a sharp shift in international demand."<sup>1</sup> If what seemed a temporary imbalance ultimately turns into a "fundamental disequilibrium," a country usually has no choice but to alter the exchange rate, impose trade restrictions or implement a mixture of financial policies which would probably be too harsh to be accepted. The disequilibrium may have been fundamental from the beginning and not recognized as such. The temporary imbalance may have evolved into a fundamental type because the added liquidity provided by the I.M.F. allowed the country to pursue internal objectives instead of correcting the external imbalance.

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events. In this case no particular policies need be implemented and the drawing rights have enabled the country to survive the imbalance. An example of this type would be a harvest failure in Canada for one year so that no wheat could be exported abroad and hence earn foreign exchange.

<sup>1</sup>D. G. Badger, "The Balance of Payments: A Tool of Economic Analysis," International Monetary Fund Staff Papers, II (September, 1951), 187. Theoretically, a fundamental disequilibrium also exists if there is a persistent surplus, but since surpluses are much less worrisome than deficits, they are usually not included.



Since a national central bank operating in its own domestic economy has the ability to create reserves for its banking system, it is often wondered if the I.M.F. has the same ability with regards to international reserves in the world economy. The answer is no; I.M.F. liabilities are not accepted as international money in the way that government liabilities are accepted as national money. However, the I.M.F. does participate in reserve creation. When it lends currencies that the central banks of the key-reserve currency countries have created previously and deposited with the Fund, the I.M.F. creates monetary reserves by putting the erstwhile dormant funds into circulation. In other words, the I.M.F. acts only as an agent in a middleman position. This discourse raises the question of just how reserves are created, and hence international liquidity expanded, under the existing system.

In the inter-war years, liquidity increased through the withdrawal of gold coin from active circulation and from commercial bank cash reserves, the devaluation of the dollar in terms of gold in 1934, and new gold production. Since World War II, liquidity has increased mainly as a result of I.M.F. transactions, Russian gold sales to the West, new gold production, and perhaps the most erratic and crisis-prone method, deficits in key-reserve currency countries.<sup>1</sup>

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<sup>1</sup>The approximate importance of each source of liquidity is compiled by Triffin, The Evolution of the International





Two questions are involved in this discussion of liquidity. The first concerns the composition of the gross international monetary reserves of a country and, hence, of the world. The second involves the selection of a standard to be used in determining whether total reserves are increasing at a satisfactory rate. A definition for the external liquidity (meaning international liquidity from a domestic point of view) of a country is "such resources as are readily available to its monetary authorities for the purpose of financing temporary deficits in its balance of payments and defending the stability of its rate of exchange."<sup>1</sup> On page 32, it was noted that reserves included gold, holdings of foreign exchange and the country's gold-tranche position. This is satisfactory enough if one remembers that reserves are gross, and not net (where net means to offset external liabilities), unconditional and

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Monetary System, op. cit., Table 9, pp. 68-69 and Table 11, p. 71. In the 1958-1962 period, I.M.F. transactions accounted for 9.0% (U.S. \$740 million); Russian gold sales, 14.0% (\$1,150 million); new gold production in the West minus private absorption, 18.5% (\$1,515 million); and key-reserve currencies, 58.5% (\$4,800 million); for a total gross reserve increase in that period of \$8,205 million. Total gross international monetary reserves in 1962 were \$65,570 million, of which I.M.F. gold-tranche positions accounted for 5.8%, gold 60% and key-reserve currencies, 34.2%. It is interesting to note that the contribution of reserve currencies to increases in gross reserves was more than three times that of gold production during the period despite the fact that the amount of gold, in proportion to total gross reserves, was almost twice that of reserve currencies.

<sup>1</sup>W. M. Brown, The External Liquidity of an Advanced Country (Princeton: Princeton University Press, 1964), p. 2.



not conditional (where conditional means credit must be negotiated or a loan has a fixed amortization schedule), and public not private resources (where private means non-official). Now that external liquidity has been defined, the adequacy question will be studied. Triffin measures reserve adequacy by the ratio of gross reserves to annual imports. Using this technique, he concludes that an average world ratio of thirty-five per cent is low for world liquidity requirements. Triffin suggests that a reserve level of not less than forty per cent is required in the world today. Countries with ratios lower than this figure can be expected to impose severe readjustment measures to increase their level of reserves. If there is any contraction below the thirty-five per cent ratio, the convertibility policies that the key trading countries are following would become difficult to maintain.<sup>1</sup> Calculating Canada's reserve adequacy ratios (Table III-1 on following page) demonstrates that, according to Triffin, the figures are on the lower side of a reasonable estimate of Canadian external liquidity requirements for most of the years.<sup>2</sup>

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<sup>1</sup>This is summarized in Triffin, Gold and the Dollar Crisis, op. cit., pp. 38-46.

<sup>2</sup>H. R. Heller, "Optimal International Reserves," Economic Journal, LXXVI (June, 1966), 296-311, presents a formula for deriving the optimum international reserve level of a country. His conclusions are quite different from Triffin's with regard to satisfactory reserve levels. The





TABLE III-1

RESERVE ADEQUACY RATIOS: CANADA<sup>a</sup>  
(millions of dollars)

	1962	1963	1964	1965 <sup>b</sup>
Gold <sup>c</sup>	708.5	817.2	1,025.7	1,150.8
Reserve Currencies <sup>c</sup>	1,830.9	1,777.8	1,648.6	1,513.7
I.M.F. Gold-Tranche <sup>d</sup>	. . . . <sup>e</sup>	. . . . <sup>e</sup>	197.5 <sup>f</sup>	353.4 <sup>f</sup>
Total	2,539.4	2,595.0	2,871.8	3,017.9
Merchandise Imports	6,203.0	6,579.0	7,540.0	8,636.0
Ratio	40.9%	39.4%	38.1%	34.9%

<sup>a</sup>Calculated from: Bank of Canada, Monthly Statistical Summary (May, 1966), pp. 367-72.

<sup>b</sup>1965 figures are preliminary.

<sup>c</sup>Gold, U.S. dollars and short-term securities of the U.S. government held by the Exchange Fund Account and Minister of Finance and Net Holdings of the Bank of Canada.

<sup>d</sup>Expressed in U.S. dollar equivalents in accordance with I.M.F. practice.

<sup>e</sup>In 1962, Canada's debtor position to the I.M.F. was \$275.7 million and, in 1963, \$196.0 million. Canada had an obligation to repurchase these amounts of Canadian dollars.

<sup>f</sup>In 1964, Canada's creditor position was \$60.0 million and, in 1965, \$215.9 million.





The study by Triffin notes that a better test would be the inclusion of all balance of payments receipts (rather than expenditures) on current (rather than merchandise) account plus any net private unilateral transfers.

Brown, on the other hand, dismisses the idea of examining only the current account. Because imports are rising or exports falling is not automatically a reason for insisting that a country's liquidity level must rise.<sup>1</sup> He takes the whole balance of payments into consideration and makes a comparison between liquidity and a country's net external balance. When measuring this ratio for the Group of Ten countries,<sup>2</sup> Brown found that the net external balance

$$R_{opt} = h \left[ \frac{\log (r \times m)}{\log 0.5} \right]$$

$R_{opt}$  = optimum international reserve level,

$h$  = average yearly imbalance in a country's stock of international reserves (estimated for period 1949-1963),

$r$  = opportunity cost of holding liquid international reserves (social rate of return on capital minus return, if any, on reserves) calculated to be approximately 5% for developed countries,

$m$  = marginal propensity to import,

0.5 = the probability of a deficit.

In 1963, Canada's optimum reserve level was \$866 million (U.S.) whereas actual reserves were \$2,603 million. The world figures are \$41,062 million and \$63,861 million respectively. Canada's formula was:

$$\$866 = 122.7 \left[ \frac{\log (0.05 \times 0.16)}{\log 0.5} \right]$$

<sup>1</sup>Brown, op. cit., pp. 6-11.

<sup>2</sup>Belgium-Luxembourg, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom and the United States.



has typically been at a level of one-fifth or less of annual imports. The ratio that he calculates will become larger and larger, the closer a country's balance of payments approaches equilibrium in the sense of current account balance equalling capital account balance. At equilibrium, the ratio will be infinity because the country does not need liquidity of any sort. A problem arises if a country has a surplus in its balance of payments rather than a deficit. About all that can be said is that reserves are usually thought to serve the purposes of financing a deficit or protecting a weak currency. There is no room for chronic surplus analysis. There is some equilibrium level of reserves even if a country is running a surplus and it is this level that a country must strive to attain.<sup>1</sup> Brown found that Canada as well as the major industrial countries of the world had ample reserves among them to finance their trade.<sup>2</sup> However, his analysis is too imprecise with regard

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<sup>1</sup>In a 1963 agreement with the United States, Canada agreed to keep its gross reserves as close as possible to a target figure of \$2,700 million to be exempted from the Interest Equalization Tax. In December, 1965, to be exempted from United States' indirect investment guidelines, Canada further agreed to reduce this figure to \$2,600 million. See Bank of Canada, Annual Report of the Governor to the Minister of Finance - 1965 (Ottawa: Bank of Canada, 1965), pp. 8-11.

<sup>2</sup>Brown, op. cit., Statistical Annex, pp. 44-66. He uses the total I.M.F. tranche positions rather than the gold-tranche positions and hence introduces an upwards bias in his ratios.





to the cause of imbalance in a country's balance of payments, the form in which reserves are being held, and the repercussions on key-reserve currency countries.

Liquidity problems may also result from capital movements out of a country due to interest rate differentials or speculation on exchange rate devaluation which may be as chronic and difficult to cure as an autonomous imbalance in the current account. To back up Brown, Yeager argues that there is enough international liquidity, and that the reason for existing problems is simply fixed exchange rates which allow countries to run consistent deficits with the help of the I.M.F.<sup>1</sup> In some cases it seems that the I.M.F. allows a country to sustain a "fundamental disequilibrium" for a longer period of time than would otherwise be possible. When the I.M.F. refuses further credit, the country is only in worse trouble with regard to financial policy implementation to correct imbalances.

The manner in which additions to the world's supply of gross international reserves are being made was mentioned above. The largest single source is recurring deficits in

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<sup>1</sup>L. B. Yeager, "The Misconceived Problem of International Liquidity," Journal of Finance, XIV (September, 1959), 347-60. He compares a family that is too poor to save for emergencies with a country in the same position. If a country is continually low in external liquidity, there is not a technical defect in international finance, but rather poverty on the part of the country concerned.



key-reserve currency countries. Whether this method is adequate or not has been examined. It is important, now, to look at the form which these additions take and to see if there are any problems in that regard. Consider first the supply side. If the key-reserve currency countries (primarily the United States) should ever be able to eliminate the deficits in their balance of payments, this source of reserves would be permanently removed. The world would then have to depend on the other sources, which are clearly inadequate. Both in theory and in reality a country cannot continue indefinitely to sustain a deficit position in its balance of payments. Thus, economists are able to agree that the untenable position of the key-reserve currency countries with respect to their balance of payments makes a scarcity of reserves inevitable in the future, even though they cannot agree as to whether the present level of reserves is adequate. As the United States has increased its liabilities and foreign countries have increased their reserves, the reserve position of the United States has deteriorated to a point of alarm. Countries that hold United States short-term liabilities may convert them into gold at any time.<sup>1</sup> The

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<sup>1</sup>United States' holdings of gold and foreign currencies in 1949 was \$24.6 billion (U.S.). This has since been depleted to \$14.1 billion in April, 1966, which does not include its gold-tranche position of \$725.9 million as of that date. Liabilities of the United States to foreign official institutions and international and regional organizations in March, 1966, was \$19.5





United States has always had a surplus on current account, and hence it is the capital account which has drained the country of its gold reserves and created new United States liabilities. This situation arose because of investments, loans and aid to foreign countries which were not counter-balanced by spending on American goods, or investment in that country. Hence, the United States has already begun to put measures into effect to cure the capital drain. Examples of these measures are the Interest Equalization Tax in July, 1963, to stop the flow of funds to foreign countries; the February, 1965, guidelines to repatriate many short-term financial assets held abroad by United States corporations; and the December, 1965, guidelines to slow the growth of United States long-term and direct investment abroad.<sup>1</sup> These types of policies are being

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billion which represents short-term liabilities and marketable U.S. government securities with an original maturity of more than one year. Statistics are compiled from U.S. Treasury Department, Monthly Treasury Bulletin (May, 1966) Table 1, p. 86 and Table 5, p. 89.

<sup>1</sup>Canada was not exempted from the direct investment guideline and this implied that there had to be a cutback in 1966 of direct investment in Canada. Because of Canada's exemption from the long-term investment guideline, though, a larger flow of these types of funds can be expected to attempt to match the flow of direct investment which would have come to Canada had it not been for the guidelines. The Bank of Canada, Annual Report - 1965, op. cit., p. 10 outlines the credit distortions which could have resulted from United States subsidiaries attempting to obtain funds from the Canadian market by bidding funds away from Canadian-owned





implemented in an attempt to eliminate the deficit in the balance of payments and hence to stop the outflow of gold.

The demand for dollar balances was large during the period from 1950 to 1958 and so the supply of them was welcomed by all. As foreign countries saw their dollar balances continue to rise, however, they became less and less willing to receive them because they feared that the excess supply of dollar liabilities could not be absorbed continuously without limit. Some countries, notably France, have started to limit their holdings of American dollar liabilities, and so they immediately convert the liabilities into gold. This not only heightens the proneness of the gold-exchange standard to crisis, but also precipitates speculation that the United States dollar will have to be devaluated, i.e., the price of gold raised in terms of the United States dollar. Hence, the system seems to have nowhere to turn. If the United States and Great Britain are able to eliminate their deficits, a shortage of world liquidity and reserves will soon develop. As a result, "trade and investment would be retarded; a reversion to direct controls, competitive currency devaluations, and other beggar-my-neighbour devices to accomplish balance of

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firms which were also trying to obtain the funds. Moral suasion was applied to Canadian chartered banks to have them recognize the situation and to service their Canadian customers first.



payments equilibrium would occur."<sup>1</sup> However, if the United States and Great Britain cannot eliminate their deficits, confidence in the continued convertibility of the two currencies will be lost, and this could force devaluation or exchange restrictions. The devaluation of a key-reserve currency is fraught with difficulties. The United States is trying to stop countries from converting U.S. dollar liabilities into gold (by issuing Roosa Bonds, for example) and thereby lessen speculation on devaluation to a certain extent.

The fact that changes in exchange rates are seldom used is another problem which exists in the present gold-exchange standard. Even when changes are made, they tend to be postponed until the last possible moment. Usually a currency crisis has already developed before action is initiated. Three reasons can be advanced for this exchange rate rigidity.<sup>2</sup> Short-run rigidity allows disequilibrating forces to build up. If the exchange rate is to be changed, it is quite obvious in which direction it will be moved. This causes "hot money" movements with no regard to interest rate

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<sup>1</sup>R. G. Hawkins, and S. E. Rolfe, A Critical Survey of Plans for International Monetary Reform (The Bulletin, No. 36; New York: New York University Press, 1965), p. 8.

<sup>2</sup>R. A. Mundell, The International Monetary System: Conflict and Reform (Montreal: Canadian Trade Committee, Private Planning Association of Canada, 1965), pp. 26-29, (hereafter cited as The International Monetary System).





differentials at all. This type of movement of funds aggravates the situation which caused the speculation and could bring the devaluation to a reality.<sup>1</sup> The second reason is concerned with key-reserve currencies, and the losses which would be inflicted upon countries which are holding key-reserve countries' liabilities as reserves. The third reason can best be illustrated with an example. If the German mark is undervalued with respect to the dollar, appreciation of the mark would bring Germany into balance, but would increase further the surpluses of its neighbouring European Common Market partners.

When speaking of exchange rate adjustment problems in the present system, it must be noted that the entire burden of adjustment rests upon the deficit countries rather than the surplus countries. The I.M.F. cannot compel any country to change its exchange rate and, hence it is only the deficit countries that come forward out of necessity. Surplus countries prefer to accumulate reserves up to a certain point for this "lengthens the period for which the country will be able, at some future time, to run a deficit."<sup>2</sup> This action puts the

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<sup>1</sup>If the speculation is short-lived, there may be mutual assistance among central banks of a short-term and reversible nature. An example of this type of mutual assistance would be currency swaps.

<sup>2</sup>T. Scitovsky, Requirements of an International Reserve System (Princeton: Princeton University Press, 1965), p. 7.



adjustment burden on the shoulders of the deficit countries and, hence, a vicious circle ensues.

The present adjustable pegged exchange rate system, therefore, might more realistically be called the fixed exchange rate system, although the possibility of exchange rate adjustments remains. "This preserves a speculative factor in the background that provides the disadvantages of both the fixed and flexible exchange rates and the advantages of neither."<sup>1</sup>

The efficient operation of the I.M.F., and hence the ability of individual countries to implement financial policies to cure external-internal imbalances, is hampered because a substantial amount of the currency holdings of the Fund now consists of useless inconvertible currencies which no country has any desire to draw. The I.M.F.'s liquidity position has been impaired in this way by the Fund's willingness to accept these inconvertible currencies from countries which are in a constant debtor position to the Fund.

Before moving on to proposed reforms of the I.M.F. and the international monetary system, Canada's position in the world economy in the recent past will be examined. It must be stressed at the beginning that no social or political motives or problems will be considered, even though many

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<sup>1</sup>Mundell, The International Monetary System, op. cit., p. 28.





policies of the government and the Bank of Canada are undoubtedly implemented for these very reasons. This is not to imply that the economic problems are the only important ones, and that social and political repercussions are of a minor nature, but rather that the latter are beyond the scope of this thesis and would demand a more comprehensive study than is possible here. Table III-2, which appears below, is a compilation of selected figures of Canada's balance of payments position from 1950 to 1965. The table is intended to demonstrate that Canada has almost consistently had a balance of trade surplus (merchandise exports minus merchandise imports) while at the same time having a current account deficit. In 1965, total non-merchandise receipts were only sixty-nine per cent of total non-merchandise payments. At the same time, Canada has had capital inflows that more than matched the current account imbalance in most years (minus changes in Canada's reserves and I.M.F. position occurred in 1953, 1955, 1957, 1959 and 1960). The above would suggest that Canada is allowed to sustain a current account deficit because of the inflow of capital into the country. The investment in Canada by foreigners, both direct and in bonds, must also be serviced, and dividends and interest payments to foreigners amounted to almost \$1 billion in 1965. "What matters in the short run is that the additional imports of goods and services do not exceed the capital inflow, and in the longer run, that the adverse





TABLE III-2

CANADA'S BALANCE OF PAYMENTS FOR SELECTED YEARS<sup>a</sup>  
(millions of dollars)

	1950	1953	1956	1959	1962	1965 <sup>b</sup>
Merchandise Exports	3,139	4,152	4,837	5,150	6,380	8,737
Total Exports	4,240	5,491	6,464	6,792	8,383	11,367
Merchandise Imports	3,129	4,210	5,565	5,572	6,203	8,636
Total Imports	4,574	5,934	7,830	8,296	9,257	12,503
Current Account Balance	-334	-443	-1,366	-1,504	-874	-1,136
Net Capital Movements	1,056	405	1,414	1,493	1,029	1,293
Change in Reserves	722	-38	48	-11	155	157

<sup>a</sup>Figures from 1950 to 1962 are compiled from Bank of Canada, Statistical Summary: Supplement, 1964, pp. 138-41; 1965 figures are compiled from Bank of Canada, Monthly Statistical Summary (May, 1966), pp. 367-68.

<sup>b</sup>1965 figures are preliminary.



changes in the balance on investment incomes are at least offset by favourable changes in the balance on goods and other services and still leave a part of the increment in total output available for domestic use."<sup>1</sup> Canada is accomplishing the short-run objectives, but the long-run objectives are more difficult to measure. A study would have to be carried out to examine the areas in which the foreign money is being invested in Canada, and the servicing charges and the payback arrangements if applicable. It would also have to be determined whether anything is left over for Canadians that would not have existed had the foreign capital not been invested. How long and in what volume capital flows can be expected to continue into Canada from abroad is another problem. One must be optimistic about the ability of the United States to correct its balance of payments position without further restraints upon the outflow of capital from that country. One must also be optimistic about the prospects for Canadian receipts, and the extent to which Canada's payments will rise relative to receipts. Outflows of capital from the United States to Canada generally follow demand and supply conditions. The outflows, however, can be stopped at any time by American legislation, and stopped immediately. Import demand cannot

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<sup>1</sup>W. Lederer, The Balance on Foreign Transactions: Problems of Definition and Measurement (Princeton: Princeton University Press, 1963), p. 72.





be halted immediately. The raising of existing tariffs and the creation of other trade restraints, such as quota restrictions and exchange controls, require time. Interest and dividends would still have to be paid to investors who have already invested in Canada. In other words, Canada's balance of payments will be in a precarious position if the United States continues to run a deficit, and if Canada continues to increase its payments and receipts in the same ratio as in the past.<sup>1</sup> Hence, it would seem that Canada can implement its financial policies, subject to the restraints cited in Chapter II, because of the current situation regarding foreign investment. There can be no argument but that Canada is economically benefitting from foreign investment. This is important because prosperity in the United States is particularly important to prosperity in Canada. Therefore, if the United States becomes more prosperous as a result of investing in Canada, Canada benefits, in the first instance, through increased demand for labour and materials, increased supplies of manufacturing goods and possible lower prices of these goods. In the second instance, Canada benefits because American gains also indirectly increase its prosperity.<sup>2</sup> The argument seems

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<sup>1</sup>For a more optimistic view, see D. W. Slater, Canada's Balance of International Payments -- When is a Deficit a Problem? (Montreal: Canadian Trade Committee, Private Planning Association of Canada, 1964), pp. 45-53.

<sup>2</sup>P. Wonnacott, The Canadian Dollar: 1948-1962 (Toronto: University of Toronto Press, 1965), pp. 293-296.



to centre around the adequacy of future United States investment in Canada, and hence around the desirable goal of balancing Canada's current account through appropriate financial policies to avoid resort to trade restrictions and exchange rate devaluation if the present situation should be altered. Canada would have an inadequate supply of international reserves, and stop-gap measures would have to be invoked, if the investment flow should decrease.



## CHAPTER IV

### "INCREASING LIQUIDITY" TYPES OF REFORM PROPOSALS

The problems associated with the present framework of the international monetary system were outlined in Chapter III. In this chapter, reforms aimed at "increasing international liquidity" will be considered. These reforms range from moderate proposals that might win acceptance in practice to thoroughgoing reforms which possibly would be accepted only by economic theoreticians because problems of national sovereignty would make them unacceptable to both politicians and monetary authorities.

Extensions of the present gold-exchange standard would still place the burden of adjustment on the shoulders of the deficit countries. Since the adjustment mechanism would not be improved, the plans offer only methods to increase liquidity and to change its form. The efficacy of financial policy, and monetary policy in particular, would not be enhanced under these plans except to the extent that the policies are given a longer period of grace than under the present system. The extension plans





are aimed at the form which international liquidity should have, and the short-term adequacy of external liquidity. Even under the present system, a country which occasionally has a temporary balance of payments deficit may rely on the I.M.F. to assist it in implementing financial policies to cure the temporary disorder. The present system allows countries to run persistent surpluses and deficits and so avoid changes in exchange rates, which countries are loathe to make in any case. The simple extension plans, and, to a lesser extent, the more complete plans still allow countries to have these persistent imbalances while implementing national full employment policies. The experience of the past twenty years has been that liquidity considerations require countries to impose restrictive financial and/or commercial policies if a "fundamental disequilibrium" is to be sustained. Most of the advanced industrial countries have a surplus or a deficit which has persisted for years and may be expected to persist into the foreseeable future. The liquidity plan which would be the soundest economically should provide for adequate international liquidity in a form agreeable to all. The plan should have not only short-term but also long-term prospects, and should provide for a certain amount of collective direction and persuasion in the various financial policies of individual countries. Thus, the policies will be applied in time, and with enough force, to prevent "fundamental disequilibria" from developing out of temporary imbalances.



The plan must also provide for countries in which a "fundamental disequilibrium" develops from such other sources as a shift in aggregate demand. In an economic sense, the above may be considered a gauge to the worthiness of the liquidity plans advanced in the following pages. In this chapter we will consider the economic acceptability of the plans under the terms discussed above rather than their acceptability to politicians or central bankers.

The present system could muddle along continuing to use increases in dollar and sterling liabilities as the primary additions to reserves. This, however, could and probably would lead to a severe crisis in the present international system. Too much would depend on correct adjustments taking place in the future. These would include the restoration of confidence in the dollar and the pound and hence an end to speculation concerning increases in the price of gold; the ability of poor countries to acquire the necessary dollar reserves; and the assurance that any new gold production, dishoarding and dollar and pound increases would fully meet the world's need for reserves.<sup>1</sup> This is actually no reform at all. If what

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<sup>1</sup>The annual addition to the free world supply of gold increased from \$1 billion (U.S.) in 1956 to \$2 billion in 1965. In the 1956 increase, private hoarding took 43%; industrial use, 18%; and net official purchases, 39%. In the 1965 increase, private hoarding took 59%; industrial use, 18% and net official purchases, 23%. Data calculated from "Gold Still Glitters," Financial Post, July 9, 1966, p. 6.





has been said in Chapter III is correct, this is not the solution, but rather the problem. Even the development of Eurodollars has not helped the situation. These dollars serve much the same purpose, and have much the same effect, as do unpoliced<sup>1</sup> financial intermediaries or near-banks vis-a-vis a policed commercial banking system within a domestic economy. A given amount of credit creation in the domestic economy will have a larger effect owing to the existence of the financial intermediary leakage. In the international economy, however, "should confidence ever weaken, the scope for a destructive chain reaction is greater than before the development of Eurodollars."<sup>2</sup>

Another plan for extension of the present gold-exchange standard is the multiple-currency standard. "This proposal is designed to finance the deficits of developed countries by expanding the reserve currency system to include currencies other than the dollar and the pound, that surplus countries will acquire and hold as reserves."<sup>3</sup> This standard would have the form of international liquidity assume a wider base. The adequacy of international liquidity would depend

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<sup>1</sup>"Unpoliced" means that there is neither a legal reserve ratio nor an interest rate ceiling.

<sup>2</sup>L. B. Yeager, International Monetary Relations (New York: Harper and Row, 1966), p. 471.

<sup>3</sup>Hawkins and Rolfe, op. cit., p. 59.



on the reserve countries creating liabilities. Trading countries that are not key-reserve currency countries would use key-reserve country liabilities as reserves. The amount of international liquidity would not change as the reserve transfer process took place. The level of international reserves is only able to rise when payments are made by a key-currency country with its own liabilities. The success of the plan would depend on the ability of the United States and Great Britain to turn their balance of payments deficits into surpluses and on the ability of the Common Market countries to turn their surpluses into deficits. This brings us back to the problems of the present international monetary system. Even if the system could manage to shift favourably, speculative flows would probably become even more troublesome than at present. Speculation breeds on numbers. There can only be speculation when there is something to speculate against, i.e., when there is more than one type of unit of international liquidity. By increasing the number of key-reserve currencies, there seems to be a false hope in the safety of numbers. It should be expected that at certain times there would be a shift from one key currency to another. The probability of shifts and, ultimately, of devaluation raises the problem of whether to tie the system to gold (directly or indirectly through such measures as "gold guarantees") to protect countries against loss through devaluation of key-reserve





currencies. The variants of this plan are many. The purpose here is not to examine the details of every variant, but rather to assess their impact upon the efficacy of financial policies. In any country whose currency is added to the key-reserve currency group, ". . . the monetary authority . . . will hardly leave it entirely to the whims or habits of bank clients to determine how the amount and composition of its foreign-exchange reserve are to change."<sup>1</sup> The monetary authorities will have to intervene in the foreign exchange market from time to time and, with the fixed rigidities of the exchange rates, cannot be assumed to play a large role in pursuit of domestic goals. This, then, would force a tremendous burden on fiscal policy and also on the individual key-reserve currency central banks. It would represent a return to an earlier era when policies implemented unilaterally took precedence over multilateral agreements. The multiple-reserve standard puts the task of reserve creation and monetary order squarely on the shoulders of individual national governments. Certainly then, monetary policy, and possibly fiscal policy to some extent, would be externally-oriented to achieve the correct foreign exchange reserve ratio, both in the level and in the distribution of key-reserve currencies. It must be noted that under a system such as this, a nation becomes a

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<sup>1</sup>Machlup, op. cit., p. 24.





lender to all the countries whose liabilities it possesses. This would pose many problems. As an example, consider a key-reserve currency country implementing a tight money policy for domestic reasons. The resulting high interest rates would attract short-term capital from other countries to the detriment of the remaining key-reserve currencies. If the other key-reserve currency countries do not, or cannot, allow this flow to materialize, they will have to institute comparable tight money policies. A pyramiding effect could begin, resulting in no benefit to the international situation; instead, a hodge-podge of inwardly oriented national policies would supplant international order. The problem existed because of interest rate differentials, ensuing capital flows and retaliatory policies. There could also be large shifts because of changing international demand for goods and services, or changing long-term investment horizons. Under these conditions, a large part of financial policy implementation would be the result of external considerations brought about by domestic rather than international wants. Countries that are not reserve centres would find no change in the efficacy of their financial policies vis-a-vis the present system. These countries would, however, now hold the liabilities of several countries as reserves rather than those of the United States and Great Britain alone. This means, as mentioned above, that these countries are lenders.



As such, they must critically examine the changing economic and political conditions in all key-reserve countries.

Another plan that is an extension of the present system may be disposed of quickly owing to its similarity to the multiple-currency standard. This proposal is the composite reserve unit or C.R.U. proposal. "The plan would require that each country in the participating group (the Group of Ten plus Switzerland presumably) place specified amounts of its own national currency with the I.M.F. which, in turn, would create composite currency units equal in value to one dollar but representing fixed percentages of the eleven currencies paid in by these nations."<sup>1</sup> The form of international liquidity would be C.R.U., gold, and dollar liabilities. Rather than depending only on present methods of increasing liquidity, the amount of C.R.U. in circulation could be increased at will. The plan attempts to rid the international monetary system of its vulnerability to speculation by instituting a "safe" reserve unit. However, the method of increasing liquidity is arbitrary, and the optimum increase for any given year would be very difficult to determine. The plan also suffers from the main short-coming of the multiple-currency standard; viz., the United States and Great Britain would both have to become surplus nations

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<sup>1</sup>Hawkins and Rolfe, op. cit., p. 68.





for the plan to become operative. Even if these two countries should become surplus nations the amount of international liquidity will fall if they simply retire their outstanding debt. Financial policies would not be any more efficient than under the present system, but there should not be any speculation against C.R.U.

All of the extension plans lack long-term effectiveness. All would function for relatively short periods of time, so that ultimately another review would be necessary and some new ad hoc arrangement chosen. Financial policy effectiveness is improved somewhat in that the amount of liquidity would increase to some extent. This will allow countries to correct a minor problem, to allow a minor problem to develop into a fundamental one, or to preserve a fundamental problem for a longer period of time. The multiple-currency standard seems to affect the efficacy question in a negative direction as compared to today.

These extension plans probably have the most chance to succeed since they are only extensions of the present system, and hence closely allied to it. This is especially true as far as politicians are concerned. They are more interested in the form which international liquidity should take rather than a correct level of liquidity. Economists cannot even agree on the best measure of the correct liquidity level, although they all seem to believe that current levels are inadequate in some respect. If the system is to function



over the long-term, more thorough-going reforms will have to be considered.<sup>1</sup> We now turn to a consideration of thorough-going reforms leading to increased liquidity.

The plans which are to be discussed represent not merely an extension of the present system, but rather a complete overhaul of it. The Keynes Plan will be considered first. It is concerned with the centralization of monetary reserves. The basis of the plan is the creation of a new international central bank. This institution would develop a new international currency unit which, with gold, would be used (instead of present national currencies) to settle international transactions. Under the Keynes Plan, this new international unit would be called "bancor" and would

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<sup>1</sup>There are other plans on the extension of the present system which have not been considered here. One such plan is an extension of mutual assistance among central banks. Due to the very short-term nature and reversibility feature, views concerning the extension of mutual assistance have been "depressingly hostile"; for creditor nations are usually not satisfied to make substantial loans for indefinite periods. They are hence seen to be very short-term stand-by agreements to shore up a present defective system and are really no reform at all. See R. Harrod, Reforming the World's Money (London: Macmillan, 1965), pp. 86-118.

Another extension plan would be to establish a fund within the I.M.F. of very convertible currencies. This has possibilities of acceptance by the Group of Ten, but the fund would only be utilized by them and with a short-term payback clause. This again changes neither the form of international liquidity nor the level. It only seeks to support the advanced countries against speculative runs against a currency. Increasing quotas under the present system were approved in 1959 and 1962. See J. Marcus Fleming, "The Fund and International Liquidity," International Monetary Fund Staff Papers





have a fixed gold equivalent.<sup>1</sup> All national currencies would have a bancor equivalent and, hence, also a gold equivalent. These equivalents would not be unalterable; rather, as today, they could be changed if a chronic disorder persisted. Keynes called the new international central bank a clearing union. He intended it to create reserves as national central banks do, rather than just transfer reserves as under the composite reserve unit plan discussed above. National central banks would no longer hold monetary reserves, but instead would hold gold and bancor. A central bank could use the overdraft facilities of the clearing union and by so doing, create reserves. A country would create reserves when it incurred a deficit larger than its credit balance at the union. Quotas on the amount which a country may overdraw would be established by taking an average of the sum of the last three to five years exports and imports. In Keynes' words, "since a credit of the clearing union to a central bank overdrawing its account can be used only for payment to other central banks, it

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XI (July, 1964), 177-215, for his conclusion that the Fund can contribute to long-term expansion through increased quotas and adjustments of drawing policies.

<sup>1</sup>Proposals for an International Clearing Union. Presented by the Chancellor of the Exchequer to Parliament by Command of His Majesty, April 1943. (London: H. M. Stationery Office, 1943). Reprinted in World Monetary Reform, ed. H. G. Grubel (Stanford: Stanford University Press, 1963), pp. 55-79.





creates new bancor balances."<sup>1</sup> A country could exchange gold rather than bancor to settle international accounts, and increase its deposits at the clearing union by selling gold to the union. The union would have no obligation to sell gold to its members. The one-way convertibility could be used in such a manner to phase out the use of gold completely if the union so desired. Interest would be charged for drawings and would increase the closer a country came to the upper limit of its quota. An interest charge would also be imposed on credit balances, and in this manner Keynes hoped to place some of the burden of adjustment on the shoulders of the surplus countries. However, the interest charges that he suggested were nominal. Keynes quoted a figure of one per cent on the first half of the quota and a further one per cent on the second half.<sup>2</sup> As Gowda points out,

this rate of one per cent is not high enough to prevent the continuation of an import surplus. An international loan at one per cent would still be very cheap. For the creditor country the charge does not seem high enough to induce it to take steps to reduce its active balance.<sup>3</sup>

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<sup>1</sup>Machlup, op. cit., p. 41.

<sup>2</sup>Proposals for an International Clearing Union, op. cit., pp. 60-61.

<sup>3</sup>K. V. Gowda, International Currency Plans and Expansion of World Trade (New York: Asia Publishing House, 1964), p. 13.



Surplus countries with a credit balance could attempt to escape interest charges by loaning bancor reserves to deficit countries. This would be a day-to-day type of loan to combat very temporary imbalances. The national central banks would then have access to a lively bancor market and so could work with a smaller level of monetary reserves. This effect has been emphasized by Machlup; "the velocity of circulation of the monetary reserves would be larger; that is to say, the ratio of needed reserves to the value of foreign trade would be smaller."<sup>1</sup> Further, assuming mobile capital, a country in a deficit position could raise the interest rate domestically through an appropriate monetary policy and thereby attract funds from abroad, thus curing part of its deficit position with the union. A country is penalized for having a deficit balance and also for having a credit balance. Most countries, then, will try to be as close to zero as possible in their balance with the union, which defeats the dynamic aspect of the plan with respect to the growth of monetary reserves over time. The union could increase the possibility of more drawings to match increases in trade expansion by increasing quotas. It would be left to the individual country to decide whether or not to make use of the increased quotas. Thus, this is a dynamic possibility, and not a dynamic reality.

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<sup>1</sup>Machlup, op. cit., p. 42.





Because of fixed exchange rates, the Keynes Plan would not attempt to make the adjustment mechanism more efficient, but rather would change the form of international liquidity and put more liquidity in the hands of the national central banks. Through the bancor market, the plan would provide that less actual bancor need be on deposit at the clearing union for a given amount of trade. Hence, except for the new non-speculative form, financial policies, and particularly monetary policy, are no more effective than they are today. This follows from the use of the fixed exchange rates and the haphazard fashion of increasing overdraft privileges for the purpose of expanding liquidity. The country will have more time to recognize that a problem exists and to implement financial policies to counteract the problem. The exchange rate must, however, still be protected (with a chance of devaluation), capital would still be sensitive to interest rate differentials and there would still be no sure way for liquidity supply to match liquidity demand. In addition, the Keynes Plan may even present problems to financial policy-makers because of an inflationary bias inherent in the plan. Keynes recognized this not so much as inflationary, but as expansionary. In his words, "the plan aims at the substitution of an expansionist, in place of a contractionist, pressure



on world trade."<sup>1</sup> He abhorred the stifling influence on trade and policies which the resumption of the gold standard had forced on the world after World War I. The effects of the plan on domestic monetary and fiscal policy are seen to be inflationary as a country could implement an expansionary policy internally, while exercising the privilege of increasing its drawing rights and borrowing in the bancor market. The country's deficit in its balance of payments would continue to increase. If the price levels of all countries rose by the same amount, they could maintain nil balances at the union. A check on inflation might develop as the quotas became smaller in relation to the size of the deficit in monetary terms, but only if the clearing union did not increase the quotas. There is no reason to suppose that countries would necessarily follow this course, but with steadily increasing drawing rights, the plan could be inflationary. The problems for the policy-makers of an individual country emerge through the transmission of inflationary pressures from other countries. For example, if the United States increased its drawings at the union to finance the buying of goods and services and long-term investment in Canada and the rest of the world, the United States would be posing problems to the monetary authorities in Canada and in other countries. First, there would be a larger demand

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<sup>1</sup>Proposals for an International Clearing Union, op. cit., p. 65.





for Canada's exports and thus the possibility of demand-pull and ultimately cost-push types of inflation. Canada would have to protect its own exchange rate and try to counteract the domestic repercussions of the United States actions. Second, with inflation in the United States, the price of American exports to Canada would increase and Canada's balance of payments could go into deficit, unless there was a large drop in the Canadian demand for United States exports. The determining factor would be the degree to which Canada's exports to the United States rose as opposed to the degree to which its imports from the United States fell. This chain of events began because of inflation in the domestic economy of Canada's main trading partner. The clearing union and fixed exchange rates allowed the United States to "export" the inflation. The union has powers to refuse drawing privileges after a certain level, but if the quotas have been increasing, this point may not arrive for some time. When the citizens of the United States send money abroad there would be drawings from commercial banks, and a decline in commercial bank deposits at the central bank. Hence, some shrinkage of the actual reserve ratio will occur there. In sum, the Keynes Plan would improve the form of international liquidity, but could create more problems for policy-makers than it would solve, depending on the course of action which the individual country might wish to pursue vis-a-vis the rest of the world.





Probably the ultimate in international co-operation and centralization of reserves is embodied in the Triffin Plan. The greatest difference between it and the Keynes Plan lies in its provision for reserve creation. In the Keynes Plan, this creation is the prerogative of the individual countries. In the Triffin Plan, each member country would deposit at least twenty per cent of its reserves of gold and foreign exchange with the international reserve Centre for national central banks. In the future, these countries would hold all of their monetary reserves with the Centre except for day-to-day working balances.<sup>1</sup> All liabilities of the key-reserve centres which were deposited at the Centre would be considered as long-term rather than sight liabilities and hence the plan has a certain attraction with regard to phasing out the present gold-exchange standard. The member countries would have to guarantee the value of their currencies against either the value of the new international currency unit or gold. With the deposits placed with it, the Centre would conduct two operations that are much the same as operations conducted by a central bank in a domestic economy. It would

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<sup>1</sup>Triffin advised that countries hold all of their gross reserves as deposits at the Centre in The Evolution of the International Monetary System, op. cit., pp. 30-42; whereas he advised that only twenty per cent need be deposited initially, and twenty per cent added per year to gross reserves, to finance the Centre's lending operations in Gold and the Dollar Crisis, op. cit., pp. 104-11. He evidently now envisages a larger and more complete role for the Centre from its inception.



lend quantities of the new international unit on a short-term basis to countries with temporary imbalances in their external accounts. The loans would bear a fixed maturity so that lengthy negotiations with the possible rejection of applications would be effectively ruled out. The Centre would also acquire negotiable securities traded on the largest exchanges around the world and thus easily disposable without loss. Its first function would be to aid countries in implementing financial policies to correct imbalances instead of resorting to the use of trade restrictions and devaluations on a wide scale. As with the present system, the lending operations are open to abuse by the borrowing countries; probably even more so because of the seemingly unconditional nature of the loans. It would be a great temptation for individual nations to foresake balance in their international accounts for domestic goals of full employment and economic growth. Potentially surplus countries would insist on some kind of guarantee against inflationary abuses of the Centre's lending potential. Triffin himself points out that this potential is unlimited;<sup>1</sup> he has suggested that expansionary

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<sup>1</sup>See Triffin, The Evolution of the International Monetary System, op. cit., p. 32, footnote 33. He explains that the Centre would be exempt from any discipline such as national central banks have through preserving balance in their balance of payments. This is much the same as national central banks eluding the discipline exercised upon commercial banks by losses of deposits from the more expansionary







movements of the Centre's assets and liabilities be limited to three to five per cent in any one year. A report of an international study group observed, however, "there is no reason to expect the international monetary authority to be any less erratic in fixing the rate of growth of international money supplies than national monetary authorities have been in fixing the rate of growth of domestic money supplies."<sup>1</sup> This seems to be the crux of the problem. How will this Centre, as envisaged by Triffin, be able to gauge the state of the international economy correctly and take steps to correct or complement the movement to the satisfaction of the majority? As with the Keynes Plan, a new international unit of currency would be created. Unlike the Keynes Plan, there is a definite procedure and instruments set up to create and destroy reserves. The bias again towards over-creation is due to the rather arbitrary fashion of increasing the amount of reserves to be created in any one period. There probably would be negative reactions from statesmen and businessmen to downward shifts in international liquidity even if the situation warranted such a move. With international liquidity rising

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to the less expansionary banks of the system. This is because lending by the Centre only increases equally the assets and liabilities of the Centre.

<sup>1</sup>F. Machlup and B. G. Malkiel (eds.), International Monetary Arrangements: The Problem of Choice. A Report on the Deliberations of an International Study Group of 32 Economists (Princeton: Princeton University Press, 1964), p. 77.



inexorably, deficits will be larger and longer-lasting than was possible before the creation of bancor. There will be correspondingly larger and longer-lasting surpluses and, hence, stronger pressures of imported inflation.<sup>1</sup> Under this plan, price levels in different countries will have to move roughly in parallel if exchange rates are to remain unchanged without introducing controls. The plan requires member countries to relinquish their monetary independence and orient their domestic monetary policies entirely towards balancing deficits or surpluses in their balances of payments. Hence, monetary policy would not be allowed to operate for internal reasons at all, but would have to follow the dictates of the international situation, assuming that domestic repercussions are felt when monetary policies are implemented and that capital is mobile internationally. However, countries will probably try to correct errant external balances by raising the interest rate to attract foreign funds, while at the same time implementing an expansionary fiscal policy (budget deficit) to insure full employment and economic growth. This could also insure a current account deficit and an inflation which is outwardly being financed by private capital movements and official borrowing from the Centre. Should either the capital movements cease or the Centre refuse

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<sup>1</sup>See Yeager, op. cit., pp. 475-479.





further credit, the readjustment in the domestic economy would be even more severe. Devaluation along with other trade restrictions would be almost certain. The ease with which inflation could be sustained and, indeed, exported under the Keynes Plan has been noted. In the long-run, the Triffin Plan is probably more volatile in this regard. The political problems that would develop concerning the question of national sovereignty seem almost insurmountable. Proponents of the Triffin Plan understand that the form and future adequacy of international liquidity are important points that must be solved by any plan that is to function properly. But, if abused, the plan offers no solution to the problem of the effectiveness of financial policies, and in certain instances increases the difficulties. It provides a solution if countries borrow only when faced with a temporary imbalance, if they use financial policies to correct external or internal balances immediately upon recognizing them and if the Centre is in a position to judge correctly and to receive approval for liquidity changes. If the above set of conditions cannot be fulfilled, the plan relies on international and national co-operation to a degree that is impracticable today and in the foreseeable future. Monetary authorities would lose completely all control of their policies, although Triffin claims they would lose less than under the present system





owing to the volatile character of the indebtedness as it exists under the gold-exchange standard.<sup>1</sup>

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<sup>1</sup>Triffin, The Evolution of the International Monetary System, op. cit., p. 37.



## CHAPTER V

### "ADJUSTMENT MECHANISM" TYPES OF REFORM PROPOSALS

This chapter will discuss methods for solving the problems of the present international monetary system which are fundamentally different from those presented in the previous chapter. In Chapter IV we considered suggestions which were aimed at solving problems of the form and the level of international liquidity, thus allowing countries more time to recognize and attempt to cure any difficulties as they arose. The reforms examined in the present chapter represent attempts to reorganize the international monetary system in such a manner that reserves are either not required at all, or are only needed to a limited extent. There is no need for reserves at all when the adjustment mechanism is changed from a fixed exchange rate system to a freely flexible exchange rate system.

The introduction of freely flexible exchange rates . . . would relieve the central banks once and for all of any functions in the international payments system and would remove any requirements to hold reserves for foreign payments. This is so because equality of receipts and disbursements would be secured





through the free adjustment of foreign-exchange rates to the supply-and-demand situation of the moment.<sup>1</sup>

Instead of a completely flexible exchange rate, some economists advocate a system of managed flexible exchange rates. This allows for government intervention in the foreign exchange market whenever the authorities feel that private speculation is inducing unfavourable effects in the movement of the exchange rate. This requires that national central banks hold a certain amount of international reserves and independently exert their will on the foreign exchange market in an official capacity. Under the freely flexible exchange rate system, only private individuals and concerns hold or purchase foreign exchange.

Other economists, in their desire to witness some sort of international order, would have specific boundaries internationally recognized for all exchange rate movements. When these boundaries were reached, upper or lower, the onus again would be on the national central banks to bring the exchange rate back within the pre-arranged limits.

Still other economists would have optimum currency areas created, within which the exchange rates would be fixed because of the mutual trade and payment patterns existing within the area. There would be different optimum currency

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<sup>1</sup>Machlup, op. cit., p. 73.



areas operating in the international economy (there could also be countries which would not wish to become members of any currency area and, hence, could be considered as areas in themselves). Flexible exchange rates would exist between the areas to reflect differential rates of growth and trade and payment patterns.

The above-mentioned proposals will form the nucleus of the reforms to be discussed under the heading of changes of the "adjustment mechanism" type. All differ somewhat with respect to the need for international liquidity; yet all are similar in that the exchange rate is allowed to fluctuate somewhat, be it between countries or between currency areas.

Although there is little possibility that freely flexible exchange rates would ever be accepted by politicians, central bankers or businessmen for reasons to be discussed below, it is still an excellent theoretical beginning because all other adjustment mechanism plans are actually variants of a freely flexible exchange rate system. Since this chapter is not primarily concerned with the fixed versus flexible exchange rate controversy, but rather with the efficacy of financial policies to achieve and maintain external and internal balance under the different systems, more complete coverage will be given to financial policy implementation under flexible exchange rates. Scammell has argued that





"adjustment to the balance of payments must be effected through movements, either in the exchange rate or in the prices and income of the adjusting country or by direct control of transactions in foreign exchange."<sup>1</sup>

Since it would seem today that no country will sacrifice its domestic goals of full employment and economic growth for external balance, adjustment through inflation or deflation cannot be used effectively when fundamental changes are required. If most countries also refuse to change exchange rates, direct controls seem to be the only answer. But, if full employment is still to be the main goal, the exchange rate must be allowed to change. Otherwise, the present maze of direct controls will be widened and enlarged because the various monetary authorities will wish to protect official exchange rates which have become unrealistic. These restrictions and controls are the only means at their disposal to protect the rate. Two of the above three goals can be satisfied at once, but not all three. If full employment must be secured, and direct controls cannot be accepted, then the exchange rate must change.

Monetary and fiscal policies would be determined solely by domestic conditions under a system of freely flexible exchange rates. Indeed, one of the problems involved with

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<sup>1</sup>Scammell, op. cit., p. 87.





flexible exchange rates is that each national government would be acting independently in this regard. Since full employment must be secured, price inflation may run rampant with no apparent discipline being applied to any country by its external balance of payments.

First, however, monetary and fiscal policy will be considered under a freely flexible exchange rate system with mobile capital movements.<sup>1</sup> Monetary policy, by altering the rate of interest, induces a capital inflow or outflow which appreciates or depreciates the exchange rate, and causes an export deficit or surplus. In this manner, monetary policy strongly affects the level of income and employment. It is the balance of payments effect which is important, not the effect of the change of the rate of interest on the domestic economy. The interest rate does not actually change in the long-run owing to the capital inflow or outflow, but there is pressure in one direction, because of the actions of the central bank. If the central bank conducts an open market purchase because the exchange rate has depreciated, the current account balance should improve. Through the multiplier process, income and employment will rise as the money supply increases. Just as monetary policy has a larger

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<sup>1</sup>This analysis is substantially from Mundell, "Capital Mobility and Stabilization," op. cit., pp. 477-478, and R. E. Caves, "Flexible Exchange Rates," American Economic Review, LIII (May, 1963), 127-128.



effect on income and employment under flexible exchange rates, fiscal policy has less effect. The latter is weakened because appreciation of the exchange rate, caused by increased government spending or similar policies, gives rise to a negative multiplier effect on income. The rate appreciates because the increased spending of the government creates an excess demand for goods and services which tends to increase income and thus increases the demand for money. This raises interest rates, and attracts capital. How much capital will flow into the country to cause the exchange rate appreciation and the negative multiplier effect, will depend again on the mobility of capital. The greater the mobility of capital, the more powerful the influence monetary policy exerts on the domestic economy and the less powerful the influence exerted by fiscal policy. Given the lag features of monetary and fiscal policies, as mentioned in Chapter II, and the fact that monetary policy is the sole responsibility of the central bank (i.e., not divided among provinces and municipalities), it is probable that monetary policies would increasingly be implemented for internal-external balance problems. There could be undesirable movements of capital not due to interest rate differentials which could force the central bank to implement policies to counteract any unwanted effects on the domestic economy.

Under flexible exchange rates, the internal or domestic economy is cushioned against changes in other countries.







These changes are caused by monetary or non-monetary sources such as inflation or shifts in demand. The cushion is the flexible exchange rate itself. Under a fixed exchange rate system, for example, inflation can be passed on from country to country; for, as the countries involved protect their fixed exchange rates, the multiplier process will affect the volume of their imports. In previous chapters it was stressed that the passing on of inflation was one of the forces working against the efficacy of financial policies under the fixed exchange rate reforms. One of the strongest arguments in opposition to flexible exchange rates is the fear that the resistance of central bankers to credit inflation may be substantially weakened under this system. There would be a depreciation in the foreign market value of the currency which, through the multiplier process on the balance of trade and income, could lead to another depreciation thus making the process cumulative. Private speculation could also work against a currency if speculators decided that the government would continue to implement financial policies in such a fashion that inflation and subsequent currency depreciation were inevitable.<sup>1</sup> However,

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<sup>1</sup>Triffin believes that this is the objection which forever damns flexible exchange rates to the pages of textbooks and economists' dreaming. He sees no way in which inflation and successive doses of depreciation can be prevented from feeding on one another until there is either



as Meade states,

at present one has to preach wage restraint and disinflation in order to stop a threat to the gold reserves. Under the new system one would have to preach wage restraint and disinflation in order to stop a depreciation of sterling or any country's currency and a continued rise in the cost of living.<sup>1</sup>

It is true that the balance of payments constraint would be non-existent, but all other arguments against inflation in the domestic economy would be amplified because of the existence of a flexible exchange rate.<sup>2</sup> With a freely flexible exchange rate, financial policies can assure internal balance because the problem of external balance solves itself.

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a currency collapse or pressure on the authorities to resort to stringent trade and exchange restrictions. Triffin also states that this inflationary spiral may be halted by appropriate financial policies, but that because of rigidities, price and wage increases can never be reversed. See his Gold and the Dollar Crisis, op. cit., pp. 82-86.

<sup>1</sup>J. E. Meade, "The Case for Variable Exchange Rates," Three Banks Review, (September, 1955), p. 21.

<sup>2</sup>An important development recently espoused by the Organization for Economic Co-operation and Development is the implementation of incomes policies by countries to augment the use of demand management through monetary and fiscal policies. Though incomes policies are an addition and not an alternative to correct demand management, they are a hope for a certain amount of help against cost-push inflation and over-zealous central bankers. The success of incomes policies has been sadly lacking, however, in countries where no legislation has been passed to insure success. See Organization for Economic Co-operation and Development, Policies for Price Stability (Paris: OECD Publications, 1962), esp. pp. 23-47.





Indeed, theoretically, the question posed in this thesis is answered in the flexible exchange rate system. Financial policies have a completely free rein to pursue internal objectives, without foresaking external objectives, because of the existence of the flexible exchange rate. "This means that countries which are not prepared to subordinate their monetary policies to the requirements of external balance should accept flexible exchange rates."<sup>1</sup>

Because of inherent short-run dangers from private speculation, it is quite important that a freely flexible exchange rate system be initiated only after inflationary domestic pressures have been brought under control. If there is domestic inflation and a weak balance of payments position before the initiation of flexible rates, speculators would fear a continuous spiral of depreciation once the flexible exchange rate system has been implemented. After the system has been initiated, speculation usually will help to smooth out the highs and lows which develop in the foreign exchange value of a country's currency. For example, if a currency depreciates from a general decline in demand for a country's exports, export trade, income and employment will be stimulated. The currency will then appreciate to a certain extent. If speculators feel that the economy involved will respond to

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<sup>1</sup>Machlup, op. cit., pp. 84-85.





the depreciation, they will enter the foreign exchange market as buyers of the currency, thus offsetting the decline in the exchange rate.

Some of the additional arguments against freely flexible exchange should be discussed, since the arguments may also be applied against the reforms to be examined subsequently in this chapter. The channels of international trade must be sufficiently sensitive to price changes if the long-term adjustments are to succeed. This is the so-called elasticity condition. In Scammell's opinion "it is likely that the demand for both the imports and exports of any country will in the short run be relatively inelastic."<sup>1</sup> Two conditions must be fulfilled if the changes in trade flows are to be realized. First, the changes may occur only if the trade flows are not obstructed by trade barriers and restrictions. Second, there must be adequate time for the adjustments to occur, i.e., time must be allowed for demand conditions to change and for shifts of productive resources to take place. The fact that the elasticity condition seems to be primarily a short-run problem is one reason for the implementation of a managed flexible exchange rate system.

Through changes in prices paid or received, flexible exchange rates add to the risks and uncertainties that already

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<sup>1</sup>Scammell, op. cit., pp. 88-89.



exist in foreign trade. This is the primary argument expressed by businessmen when flexible exchange rates are being considered. However, such risks can be avoided through a well-organized forward exchange market. Since these types of markets exist today, it would only be a matter of expanding the facilities to meet the need. Through the plethora of quota restrictions and tariff changes that continually evolve today in the attempts of governments to protect an unrealistic exchange rate, businessmen suddenly find themselves debarred from markets, either totally or partially, without any warning. At least through the forward exchange market there is protection for those that want to take advantage of it.

A third objection to flexible exchange rates is a supposedly deleterious effect on international investment. This difficulty could be partially circumvented if loans were repaid and serviced in the lender's currency. Indeed, the difficulty could be wholly circumvented if an institution were created to guarantee a specific exchange rate. It would bear the brunt of any adverse changes, just as it would bear the profit from favourable changes. By dealing in the forward foreign exchange market it would probably be able to lessen any large losses. In fact, in the long-run, there is hardly any difference between investment under a fixed exchange rate system and under a flexible exchange rate system because





fixed exchange rates are not immutable into the foreseeable future.

The above, including the inflation argument, constitute the main reasons for rejection of a freely flexible exchange rate system. In theory, however, its simplicity and the fact that it permits domestic goals to dominate policy would lead one to conclude that flexible exchange rates are the answer. If flexible exchange rates were accepted, it would have to be a one-by-one conversion because of the "greater and unaccustomed power and responsibility conferred on central banks by freely fluctuating rates."<sup>1</sup> Following the same line of reasoning, freely flexible exchange rates should not be instituted in countries where monetary policy is not or cannot be effective, or where the government cannot pursue fiscal policies which will affect income and employment.<sup>2</sup>

Some of the problems discussed above are definitely short-run in nature. Certain advocates of flexible exchange rates then put forward the suggestion of managed flexible

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<sup>1</sup>E. Sohmen, International Monetary Problems and the Foreign Exchanges (Princeton: Princeton University Press, 1963), p. 75.

<sup>2</sup>A somewhat surprising example of a country unable properly to implement and maintain a flexible exchange rate system is Canada. "The Canadian flexible exchange rate is gone now, victim not of its own malfunctioning but of squarely inappropriate monetary policies." Caves, op. cit., p. 128.



exchange rates. The central bank would operate a stabilization fund to offset or complement movements in the value of the country's currency. It is quite probable that private speculation will do as good a job as any official fund in "adjusting exchange rates to long-run changes in the underlying real conditions of production and exchange."<sup>1</sup> The official fund would be organized to counteract spiral deteriorations of the currency's value and to smooth out short-run movements. Upper and lower limits to the movements of the rate would be established, at which point the authorities would enter the foreign exchange market. The very limits could assure speculators that there would not be a continuous spiral of inflation to justify their speculation against the currency. The limits which are agreed upon must be set with a firm assurance that they will be upheld, or the system will experience the worst of both the fixed and flexible systems; for there would be no assurance against cumulative inflation, and so speculation would attempt to drive down the exchange rate. When the lower limit was reached, the adjustment mechanism would no longer function. There are two main problems even if the limits are assured. First, each country will set its own limits, and various countries conceivably could be working to achieve mutually incompatible

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<sup>1</sup>Meade, "The Case for Variable Exchange Rates," op. cit., p. 22.





ends. This would be a situation similar to that occurring during the inter-war years when no international monetary co-operation whatsoever existed. Second, it might be feared, and probably rightfully so, that competitive exchange depreciations would take place to cheapen the price of a given country's exports for trade rather than balance of payments considerations.

These two problems are probably behind the adoption of the "band" proposal by some economists as the solution to the problems facing the international monetary system. Halm, for example, has stated that "the proposal to broaden the band of permissible exchange-rate variations, but to maintain fixed parities, seeks to retain some of the discipline which can be expected of a system of permanently fixed exchange rates, and some of the greater freedom and the smoother adjustment process which can be secured by flexible exchange rates."<sup>1</sup> Under such a system, the support points are pushed apart to predetermined limits within the framework of the I.M.F., so that uniformity would be enforced upon each country with respect to the width of the band. The central banks of each country would guarantee that the support points would be protected by the buying or selling of unlimited

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<sup>1</sup>G. N. Halm, The "Band" Proposal: The Limits of Permissible Exchange Rate Variations (Princeton: Princeton University Press, 1965), p. 17.





amounts of foreign exchange once the limits were reached. As the central banks gained experience in the operation of the system under a widened band, the limits could be further widened until ultimately there would be a completely flexible exchange rate system. Whether or not the system would be managed depends on short-run capital movements. If there are speculative flights or other disequilibrating movements, it would probably be best for the central banks to perform a "smoothing" function within the limits. Experience would dictate the answer; at some stage, the system might evolve into a freely flexible exchange rate system. The width of the band would be governed by the reason for instituting the spread. If only capital movements are to be affected, a narrow band is all that is required. If, on the other hand, direct effects on imports and exports are desired, then quite a wide band would be preferable. Too much timidity in setting the width of the band could be deleterious. There must be at least enough room for variations in the exchange rate to permit the adjustment mechanism to operate efficiently.

Hence, the proposal is seen to be a compromise solution to the fixed versus flexible exchange rate controversy. If rigidly adhered to, the proposal would correct minor imbalances by the adjustment process, while allowing for normal changes in demand and supply conditions. In addition, the monetary authorities of each country would be



required to take action once a limit was reached. Within this context, the balance of payments would stand as a limit to blatant inflation in pursuit of domestic goals, but without the shock of devaluations and the tremendous need for reserves experienced under the present system. Financial policies would be comparatively free to pursue domestic objectives within the limits of the band. This means that national governments would still have to analyze conditions in the main trading countries and tailor their own policies accordingly. If a country continuously implemented expansionary policies, the bottom limit would soon be reached, and the country would again be faced with a fixed exchange rate. The harmonizing of national policies should therefore follow inevitably through international monetary co-operation. This would also be needed to insure that countries did not attempt to force their currency value to the lower end of the band. Under the proposed system, the bank rate would be determined primarily by the requirements of internal economic goals. Monetary policy would not have to follow objectives contrary to those of fiscal policy to achieve external as well as internal balance.

Under such a system, the exchange rate will depreciate if a deficit occurs in a country's balance of payments. The deficit country could still have lower interest rates than would be possible with a fixed exchange rate. The





rise in value of the surplus country's currency in terms of the deficit country's currency would act as a counter-weight to the interest rate differential between the two countries. This would be especially helpful if the surplus country was raising its interest rate to stop inflation. This is not to imply, however, that equilibrating forces will automatically tend to ensure that a balance will be struck. The central banks may still wish to intervene in the market to oppose or to complement a movement in currency valuations. Thus, from an international point of view, it would seem that this proposal offers the most latitude for the efficacy of monetary and fiscal policies (and especially the former), while still imposing a discipline on expansionary policies geared solely to domestic goals. From a national point of view, it offers less freedom than a freely flexible or even a managed flexible exchange rate system, but it would still placate central bankers who insist on domestic freedom and yet desire some degree of international monetary co-operation and growth. This proposal would not insist on far-reaching changes in the present make-up of the I.M.F. It would still allow for such innovations as the introduction of C.R.U. or a multiple-currency standard, as discussed in Chapter IV. Changes and extensions in the form and level of international liquidity, then, could be implemented if desired.



Before leaving the subject of reforms of the "adjustment mechanism" variety, a new and rather different approach should be noted. This involves the concept of optimum currency areas. The main stumbling block to a clear definition of this proposal centres around the difficulty in defining the boundaries of an optimum currency area and in elaborating the circumstances under which an area will be operable. Mundell defines an optimum currency area as follows: "If the world can be divided into regions within each of which there is factor mobility and between which there is factor immobility then each of these regions should have a separate currency which fluctuates relative to all other currencies."<sup>1</sup> If labour and capital are insufficiently mobile within a country, varying degrees of unemployment or inflation may be expected in the various regions because of the existence of a fixed national currency between all the regions of the country. This could be cured if each region had its own currency, the external value of which fluctuated. There would not have to be inflation or unemployment in any of the regions within which mobility is present. Mundell enlarges the point with the following example. If the eastern United States and eastern Canada produce cars, while the western United States and western Canada produce lumber, the East should have a

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<sup>1</sup>R. A. Mundell, "A Theory of Optimum Currency Areas," American Economic Review, LI (September, 1961), 663.





currency area and the West should have a currency area with flexible exchange rates between them. This relationship would replace the present currency areas formed by national boundaries. If demand increased for lumber and decreased for cars in currency areas formed by national boundaries, the West would have to inflate or the East would have to suffer a certain amount of unemployment, or some of each. Countries, however, cannot be broken up in this fashion. Mobility must be assumed to exist inside countries, and the task is to find countries which have factor mobility between them.

Since sovereign governments would not at present relinquish the ability to create money, one currency for each region can be interpreted to mean many currencies which are fully convertible and rigidly tied together with fixed exchange rates. No perfect delineation is possible, but degrees of factor mobility and immobility would be the determining factor in deciding which countries would form areas and with whom. This would imply very open economies among the countries in any particular region. McKinnon has stated that as one moves across the spectrum from closed to open economies, "flexible exchange rates become both less effective as a control device for external balance and more damaging to internal price-level stability."<sup>1</sup>

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<sup>1</sup>R. I. McKinnon, "Optimum Currency Areas," American Economic Review, LIII (September, 1963), 719.





With a highly open economy, a depreciation of the exchange rate would cause the prices of exportables and importables to rise in terms of the domestic money unit. Production of importables and exportables should rise and the consumption of them should fall. Reduction in the direct absorption caused by the rise in the prices of exportables and importables may have to be supplemented by a deliberate contractionary monetary-fiscal policy because the price of non-traded goods will also rise. The important economic consequence in an open economy is the relative price changes between traded goods (exportables and importables) and non-traded goods, not the changes in the terms of trade for external balance. McKinnon advises that monetary and fiscal policies would be more effective than exchange rate variations in reducing domestic absorption, i.e., real expenditures, in all sectors to improve the trade balance. He then constructs a model involving a relatively closed economy, and suggests that a floating exchange rate would be best to cure an unfavourable trade balance. The effect of a currency depreciation on the general domestic price level would be much less than would be the case in an open economy. The application of the analysis to optimum currency areas is quite clear. If any group of countries do most of their trading with each other and if there is a high degree of capital mobility among them, the formation of a currency



area or region will be to their advantage. There would be rigidly fixed exchange rates between the countries in any one area. The countries would be financially integrated and would have to progress together step-by-step in their trade and payments in order to keep their assigned fixed exchange rates. In place of devaluation, monetary and fiscal policies would be used to make adjustments in their respective domestic economies if one of them should develop a "fundamental disequilibrium." However, since these countries formed the currency area because of factor mobility among themselves and because of their large volume of mutual trade such "fundamental disequilibria" should not develop very often given correct monetary and fiscal policies.<sup>1</sup> Hence, a concept of regions develops rather than a concept of countries loosely held together by some organization such as the I.M.F. Optimum currency areas do not, however, preclude the existence of the

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<sup>1</sup>In a study conducted by R. Triffin and H. Grubel, "The Adjustment Mechanism to Differential Rates of Monetary Expansion Among the Countries of the European Economic Community," Review of Economics and Statistics, XLIV, (November, 1962), 486-491, it was found that "the five countries of the European Economic Community with wide open economies, a high degree of economic integration, stable exchange rates, and relatively low and declining levels of trade and exchange restrictions among them, exhibited, already in the 1950's many of the characteristics of inter-regional-- rather than international--adjustments as described by traditional economic theory." (p. 490) They found that independent national monetary policies had little influence on prices, production and employment, but rather on the balance of payments. Monetary policy could only become effective within the framework of the area as a whole.







I.M.F. The development of at least three currency areas or monetary blocs could be expected in the free world today. These would consist of the dollar area and the sterling area substantially as they are today, with the probable addition of an area consisting of the Common Market countries.<sup>1</sup> Mundell suggests that the currencies of the area countries be fixed in terms of gold with widened gold margins between one area and the two others. It is in this way that adjustments would take place between areas. This would allow for a wider separation of interest rate policies in each centre by permitting a wider scope for discounts and premiums on forward exchange. Hence there would be little capital movement between the blocs to disturb each region's balance of payments. Trade balances between the blocs could be corrected without primary reliance on domestic financial policies. When a bloc reached a gold point, there would have to be compensating flows of gold and consequent financial policies to cope with the situation. The room for maneuvering, though, would be considerable; enough for price adjustments within the limits. Periphery countries would hold interest-bearing liabilities of centre countries, but only gold would flow between centres. The I.M.F. could issue gold certificates whose value could be raised if gold production did not fully meet inter-area trade

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<sup>1</sup>R. A. Mundell, The International Monetary System, op. cit., pp. 47-50.



increases. The proposal offers a discipline within each area and between the various areas because of the limits within which the centre's currencies are able to fluctuate. The plan also allows monetary co-operation and a certain amount of freedom to the areas, rather than the countries, with regard to financial policies.



## CHAPTER VI

### CONCLUSION

The efficacy of financial policy in achieving and maintaining internal and external balance has been examined under the present international monetary system and under various reform systems. These reforms have ranged from mere extensions of the present system to thorough-going proposals which would require a complete departure from the present organization. The implications for monetary policy have been studied more intensively than those for fiscal policy because of the effect of monetary policy on interest rates and, hence, on capital movements.

No particular plan offers a solution which all interested parties would find agreeable. Theoretically, freely flexible exchange rates offer the most latitude to financial policy-makers because they eliminate the problem of external balance. Thus, policy-makers may devote themselves exclusively to the internal objectives of price stability, economic growth and full employment. Inflation cannot be carried beyond a country's boundaries because of the insulation provided by the flexible exchange rate. The form and level of international reserves





would not matter in theory. However, the reasons that make flexible exchange rates acceptable to theoreticians also make them almost impossible to accept in practice. Price stability may be foresaken and, in an era of growing internationalism, flexible exchange rates are necessarily inconsistent with outwardly instituted objectives. Freely flexible exchange rates have maximum efficiency, but without any international monetary order or co-operation.

Businessmen are at the opposite end of the spectrum. Absolutely fixed exchange rates seem to be considered a necessity to firms operating in the international economy. These firms do not seem to realize the consequences of trade and payment restrictions invoked to protect an unrealistic exchange rate. The Keynes Plan or the Triffin Plan would probably be most acceptable to them because they provide for fixed exchange rates, an international organization to increase liquidity and a non-speculative form of international liquidity. Because of the complete monetary co-operation which would be required in the international sphere under these two plans, there is little possibility that they could be implemented in the near future. Financial policies would be largely governed by external objectives under these plans.

The question of national sovereignty associated in particular with the Triffin Plan, dooms the possibility of its acceptance by politicians, at least for the present. A



supra-national government must be successfully initiated before a supra-national central bank is attempted. However, politicians do seem to desire some sort of international order with at least adjustable pegged exchange rates, and with no substantial change in present practices except for the form which liquidity should take. Thus, they tend to favour such extensions of the present system as C.R.U., which would introduce a non-speculative form of liquidity and ensure a certain amount of increased liquidity each year. Financial policies would not be any more efficient than in today's system.

Central bankers are also loathe to accept many changes in the present system. They are able, however, to see that some change in the adjustment mechanism must be made. At present, central bankers tend to dislike the Triffin Plan and similar centralization plans, though they realize that C.R.U. is only a very short-term prospect. The central bank authorities probably will accept the "band" proposal or even the optimum currency area suggestion. The width of the band and similar problems could only be resolved through negotiation. Financial policy-makers would have room to pursue domestic goals and objectives, subject to the constraint offered by the limits of the band. There would still be international monetary co-operation to some extent and a degree of discipline would be forced upon individual countries.





Only brief mention of time spans has been made in this study. The C.R.U. and multiple-reserve currency standard plans are basically short-term. The band proposal and optimum currency area plan are intermediate in length, while the Triffin and Keynes Plans are long-term proposals. If the individuals concerned with international finance continue to pull in opposite directions, any chance of a long-term solution to the currently evolving difficulties will be lost, as will the chance of increasing the efficacy of financial policy.



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